

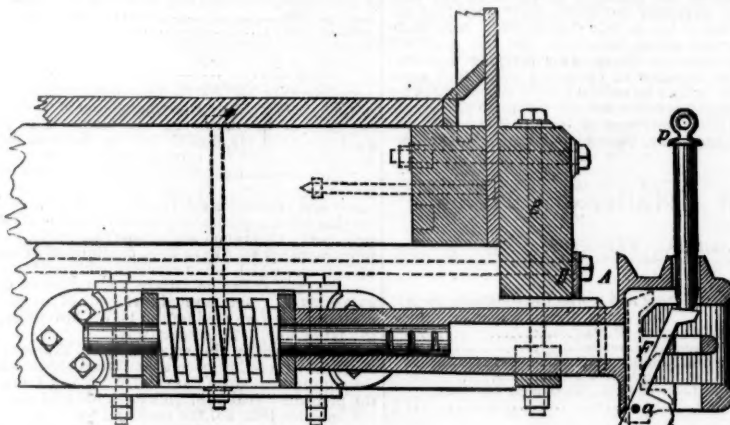


SATURDAY, NOVEMBER 20, 1875.

## Spooner's Car-Coupler.

Patent car-couplers and inventors thereof are legion, and are productive of infinite weariness to railroad managers and officers—and editors of railroad papers. We do not often venture to publish any illustrations of such contrivances, because we know by experience that any manifestation of interest in this subject is quite sure to bring a host of inventors down on the person exhibiting it.

The device which we illustrate is used on the Eastern Railroad (Massachusetts) and commended itself, not so much on account of its self-coupling feature, as for the attachment which prevents the crushing of men's hands when drawing the coupling-pins. This consists of a lug, *A*, which "brings up" against a plate *B*, on the end timber or dead-wood, *E*, when the buffer spring is compressed to the full limit of its action. This leaves 25/16 inches space between the end sheathing when two cars with such draw-bars come together, which is ample room for a man to stand between the cars. When the lug *A* touches the plate *B*, there is also sufficient room between the coupling-pin, *P*, and the dead-wood for a man's hand in drawing the pin. As we have heretofore pointed out, a very prolific cause of accident is due to the fact that when a brakeman or switchman takes hold of the pin, a sudden concussion will force the draw-bar in so far that the pin crushes the man's hand between it and the dead-wood. Such accidents the lug *A* is intended to and does prevent, and it has now been in use on the road referred to long enough to demonstrate its value. We have pleaded so often in behalf of suffering brakemen that we should not do it again did we not remember the terrible suffering and danger to which they are exposed by the stupid, blundering manner in which many cars are constructed.



SPOONER'S CAR COUPLER.

Although the self-coupling feature of the arrangement we illustrate does not commend itself so highly as the simpler device we have described above, the managers of the road on which it is used speak highly of its merits. These are shown so clearly that little or no description is needed. A pawl or latch, *F*, is pivoted at *a* and falls forward so that it supports the pin as shown in the engraving. When another car approaches, its link enters the mouth of the draw-head and knocks the pawl *F* backward, so that the pin *P* drops, and thus secures the link.

## The Michigan Railroad Commissioner's Report for 1874.

From advance sheets we copy the following portion of this remarkably clear and well presented report, which is dated at Lansing, Oct. 30:

To the Hon. John J. Bagley, Governor of Michigan:

Sir—I have the honor to submit to you my third annual report, covering the operations of our railroad companies for the period from Jan. 1, 1874, to Jan. 1, 1875.

Although this was a period noted for its financial reverses and a general prostration of business in its various branches, and equally as disastrous to railroads as to other enterprises, it will be seen from an examination of the table giving a "Comparative summary from returns for 1873 and 1874," which will be found on pages ix and x of this report, that the companies doing business in our State have so conducted their affairs, as that the results for 1874 will, unexpectedly perhaps, bear a favorable comparison with those of the previous year.

## RAILROAD MILEAGE AND CONSTRUCTION.

The miles of road owned by the thirty-four corporations doing business and reporting to this department, is 5,278.36, of which 3,314.98 miles lie within this State. Of the above there are 4,484.71 miles of main line, and 831.55 of branches. There are 304.55 miles of double track, and 898.89 miles of sidings, exclusive of the Chicago & Northwestern, which does not report this item. Only one road, the Mineral Range, 12 1/2 miles in length, is of the narrow, or three-foot gauge. Five of our roads report less miles of main track than last year; but in most, if not all of these cases, the decrease is owing to new and more accurate measurement.

The following table shows the increase and decrease for the year, the roads not mentioned having the same mileage as heretofore reported:

	Inc.	Dec.
Chicago & Canada Southern.....	.60	
Chicago & Lake Huron.....		.63
Chicago & Michigan Lake Shore.....		3.00
Chicago & Northwestern.....	11.08	
Detroit & Bay City.....	.50	
Detroit & Milwaukee.....	2.00	
Detroit, Lansing & Lake Michigan.....		8.80
Forward.....	14.18	12.13

Forward.....	14.18	12.13
Flint & Pere Marquette.....	47.84	
Lake Shore & Michigan Southern.....	3.96	
Mansfield, Coldwater & Lake Michigan.....	11.50	
Marquette, Houghton & Ontonagon.....	4.17	
Total.....	77.69	16.09

Increase for the year, 61.6 miles.

The increase in the Chicago & Northwestern has been the construction of additional branches to mines in the Upper Peninsula. The Detroit & Milwaukee has also built a short branch to the coal mines at Cornuna. The only railroad construction of importance during the year, however, was the completion of the Flint & Pere Marquette to Ludington, its lake terminus—a distance of forty-eight miles. The Mansfield, Coldwater & Lake Michigan should have appeared in the report for last year; but the returns failed to show any portion of the road opened for traffic.

The average number of miles of railroad constructed per year in this State for the last thirty-four years, from 1841 to 1875, is 97 1/2; but if the average be taken for the last ten years, from 1865 to 1875, the period which has marked our greatest activity in railroad construction, we find it has been 830 miles; the greatest number of miles built in any one year being 901, in 1872.

This rapid construction of railroads has gone on until we find that in the four southern tiers of counties of our State, embracing 17,894 square miles of territory, and a population, according to the census of 1874, of 997,701, we have 2,333 miles of railroad. This is equal to one mile of road to every 427 inhabitants; while in Massachusetts, where the population is comparatively dense, and where, too, the construction of railroads was begun at a much earlier date than in our own State, there is only one mile of road to every 879 inhabitants; showing that for the portion of our State named, which is by far the most densely populated, we have in proportion to the inhabitants more than two miles of road to one for that commonwealth. In this respect also we excel Connecticut, which is thickly peopled, and whose railroad system is well developed, that State having but one mile of road to every 620 inhabitants; so that we have within the limits of the territory mentioned, in proportion to the population, one and two-fifths miles of road to one for that State.

The several corporations doing business in this State report a total paid-in capital stock of \$138,850,373.61, or \$26,529.76 per mile of road owned. The proportion for the miles of road lying in this State is \$63,529,917.86. The amount paid in per mile varies greatly, the older lines showing the largest, and the newer lines, or branches, the least amount of capital actually invested. These differences are susceptible of a ready

The expenses of operating, as compared with 1873, shows a decrease of \$3,018,336.99, or 8.93 per cent.

That the roads have been carefully and economically operated during the past year may be inferred from the fact that while there has been a decrease of \$2,250,073.94 in the gross earnings, the operating expenses have been lessened \$3,018,336.99; thus more than keeping pace with the decrease in earnings.

In 1873 the operating expenses of seven roads exceeded their gross earnings by \$360,413.88, while for 1874 but four show a deficit in this account, amounting to \$180,963.84. These roads and the amounts of the excess of their operating expenses above earnings are as follows:

Roads.	Operating expenses above earnings.
Chicago & Canada Southern.....	\$5,622.66
Hecla & Torch Lake.....	38,688.58
Michigan Air Line.....	131,705.36
Toledo, Canada Southern & Detroit.....	6,917.23
Total.....	\$180,963.84

Of the above roads, the Hecla & Torch Lake occupies so anomalous a position that it is hardly just to it to be classed among them.

The Michigan Air Line is operated by the Michigan Central in connection with the main line, forming, for the purposes of traffic, a double track between Jackson and Niles. But since it has a separate corporate existence, its earnings and expenses are reported distinct from the line of which, for purposes of operation, it forms a part.

## EARNINGS AND EXPENSES PER TRAIN MILE.

The earnings per train mile run were: For passenger trains, \$1.59; for freight trains, \$1.71; and the average for all trains earning revenue, \$1.65.

The operating expenses per train mile run, for all trains, were \$0.91.7, or 10.3 cents less than for the previous year; but this expense, when applied only to trains earning revenue, is \$1.10. The expenses per train mile are divided as follows: Maintenance of way, 26.2 cents; maintenance of motive power and cars, 20.6; and miscellaneous expenses, 63.2 cents.

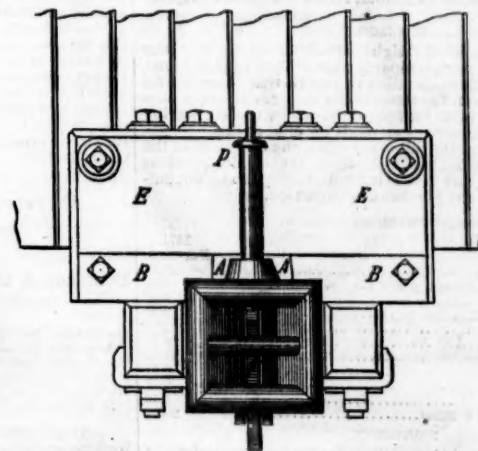
The interest expense, per revenue-earning train mile run, was 39 cents, making a total of train mile expense of \$1.49.

## INTEREST.

The total interest liability of our roads is (approximately) \$10,904,490.46, of which \$5,673,445.46 was reported as paid during the year, while \$2,231,044.76 remained unpaid.

If, now, we add to the expense of operating the interest which accrued during the year, we have, as the total cost of operation and investment, \$41,447,739.35.

But out of the thirty-four corporations doing business in this



explanation in a majority of the cases; but in the case of a few of the roads, of which the Michigan Lake Shore, with but \$782.61 paid in per mile, may be cited as an example, it would seem that a sound financial policy demanded a larger investment of paid-up capital. It is a noticeable fact that the aggregate of capital reported the present year is less, by \$591,502.14, than as reported for 1873. There is, however, reason to believe that the amounts here given are more nearly accurate than those for the previous year.

## DEBT.

The funded debt of our roads is reported at \$147,905,273.40, and the floating debt at \$8,573,670.06, making the total debt liability \$156,468,943.46, of which the proportion for Michigan is \$95,674,237.07. The debt per mile of road is \$30,128.56.

The total investment in our roads represented by the paid-in stock and debt is \$295,348,247.17, or \$56,862.77 per mile of road.

It will be noted that while the paid-in stock reported shows a decrease, the total indebtedness has increased during the year \$7,654,239.69; an addition of 5.14 per cent.

## COST.

The reported cost of roads and equipments, as shown by Table IV., is \$282,106,775.36 or \$54,453.91 per mile. The cost of road exclusive of equipment, for the thirty companies by whom this item is reported separately, is \$225,124,608.30, or \$46,715.13 per mile; and of equipment for the twenty-two roads reporting this item, \$57,978,058.30, or \$6,768.06 per mile of road operated. If, however, the cost of equipment be charged wholly to the miles of road owned by the companies owning the equipment, the cost per mile is \$7,942.03.

As compared with the returns for 1873, the above total cost of roads and equipment shows an increase of 3.09 per cent.

## GROSS EARNINGS.

The gross earnings for the year of all the roads doing business in this State was \$45,899,289.74, or \$8,179.94 per mile of road operated. Of the above total, \$14,481,100.11 represents the earnings from passenger trains, of which \$12,537,230.74 was for passengers, \$1,093,484.54 from mail service, and \$850,374.83 from express. The earnings from freight were \$31,071,591.01, and from miscellaneous sources, \$346,218.52. The percentage which these various items bear to the total earnings is as follows, viz.: passengers, 27 per cent.; mail, 2 per cent.; express, 1.4 per cent.; freight, 69 per cent.; miscellaneous, 0.6 per cent.

The total earnings show a decrease, as compared with those of 1873, of \$2,250,073.94, or 4.69 per cent.

It may be noted, in this connection, that the above decrease in gross earnings is less than the decrease of that item on the Lake Shore & Michigan Southern alone, which amounted to \$2,268,378.50; and of this amount, \$1,549,079.59 was due to the decrease in freight rates.

## OPERATING EXPENSES.

The total expense of operating our roads during the year was \$30,543,249.13, or \$5,442.52 per mile. This total expenditure is divided as follows: Maintenance of way, buildings, etc., \$7,255,110.10, or 23.8 per cent. of the whole; motive power and cars, \$5,690,700.12, or 18.7; miscellaneous expenses, \$17,598,002.91, or 57.5 per cent.

State, fourteen failed to pay either the whole or a part of their interest. Eight companies failed to report any part of their interest as paid, which, for these companies, amounted to \$880,090.00. The following are the companies, with the amount of interest on their indebtedness:

Roads.	Amount of Interest.
Chicago & Canada Southern.....	\$173,690.00
Chicago & Lake Huron.....	289,800.00
Detroit, Hillsdale & Indiana.....	117,600.00
Fort Wayne, Jackson & Saginaw.....	100,000.00
Traverse City.....	17,500.00
Mansfield, Coldwater & Lake Michigan.....	
Michigan Midland & Canada.....	28,000.00
Toledo, Canada Southern & Detroit.....	84,500.00
Total.....	\$880,090.00

The following named companies report part of their interest as paid, the amounts unpaid by each being as given below, and aggregating \$1,350,954.76:

Roads.	Interest Unpaid.
Chicago & Michigan Lake Shore.....	\$491,000.00
Detroit & Milwaukee.....	345,484.20
Detroit, Lansing & Lake Michigan.....	258,650.00
Marquette, Houghton & Ontonagon.....	193,275.56
Michigan Central.....	1,915.00
Michigan Lake Shore.....	70,400.00
Mineral Range.....	500.00
Total.....	\$1,350,954.76

The operating expenses and interest of the following twenty-three roads, or more than two-thirds of the whole number, exceeded their gross earnings by the several amounts named, and aggregating \$2,469,977.26. This total deficit is \$223,297.26 less than for the previous year:

Chicago & Canada Southern.....	\$171,341.66
Chicago & Lake Huron.....	199,592.09
Chicago & Michigan Lake Shore.....	289,797.70
Chicago, Detroit & Canada Grand Trunk Junction.....	223,544.82
Detroit & Bay City.....	75,982.71
Detroit & Milwaukee.....	213,449.91
Detroit, Hillsdale & Indiana.....	101,176.34
Detroit, Lansing & Lake Michigan.....	136,170.37
Flint & Pere Marquette.....	142,864.45
Fort Wayne, Jackson & Saginaw.....	63,881.37
Grand Rapids & Indiana.....	48,092.27
Traverse City.....	8,150.43
Mansfield, Coldwater & Lake Michigan.....	
Marquette, Houghton & Ontonagon.....	102,886.23
Grand River Valley.....	22,496.07
Jackson, Lansing & Saginaw.....	62,736.64
Kalamazoo & South Haven.....	26,064.85
Michigan Air Line.....	290,802.58
Michigan Lake Shore.....	68,323.87
Michigan Midland & Canada.....	23,337.67
Paw Paw.....	854.56
St. Clair & Chicago Air Line.....	16,294.14
Toledo, Canada Southern & Detroit.....	102,417.23
Total.....	\$2,469,977.26

## NET EARNINGS.

The gross earnings, when compared with the total expense



of operation, show as the net earnings for the year \$15,356,040.61, or \$2,737.42 per mile of road operated. This is an increase above the net earnings for 1873, of \$759,263.05, or 5.2 per cent.

The above amount is equal to 5.4 per cent. on the total cost of roads and equipment, as reported by the companies, and 5.2 per cent. on the investment represented by the paid-up stock and debt. This latter item is a decrease from the previous year of four tenths of one per cent.

Although there has been a considerable increase of earnings, the increase in the total amount of debt has been such as to more than overbalance the gain in earnings, and to produce the lessened per cent. above noted.

#### NET INCOME.

The gross earnings for the year being, as before mentioned, \$45,899,289.74, the total of operating expenses \$30,543,249.13, and the total of interest \$10,904,490.46, we have as the net income resulting from the year's business \$4,451,549.99; a sum equal to \$795.02 per mile of road operated, and 3.2 per cent. on the paid-up capital stock. As compared with the previous year, the net income shows a falling off of \$128,563.74, or 2.8 per cent.

#### DIVIDENDS.

But one company reports dividends paid during the year, viz:

The Lake Shore & Michigan Southern, one of 10 per cent.  
On preferred stock, amounting to..... \$53,350 00  
One of 3½ per cent. on common stock, amounting to..... \$1,661,661 25

Total.....\$1,661,661 25

This total of dividends is equal to 1.19 per cent. on the paid-up capital stock of all the companies doing business in this State.

#### MILEAGE.

Train.—The train mileage for the year was 9,352,275 miles for passenger trains, 18,119,684 miles for freight trains, 257,173 miles for mixed trains, and 6,088,199 miles for construction and other trains; making a total train mileage for all trains, of 33,817,231 miles. The miles run by trains earning revenue was 27,155,802.

As compared with the previous year, this shows an increase of 206,822 miles for passenger trains, or 2.26 per cent.; a decrease of 1,299,186 for freight trains, or 6.69 per cent.; and an increase for other trains of 1,832,186, or 40.77 per cent.

Passenger.—Twenty-nine roads report a total number of passengers carried of 10,268,373, an increase over the number carried in 1873 of 629,826, or 7.22 per cent. Twenty-six roads report their total passenger mileage, or passengers carried one mile, giving an aggregate of 430,392,230.

Freight.—But twenty-two roads report their freight mileage, or tons carried one mile. The total for these amounts to 1,932,955,796 tons.

#### TONNAGE.

The aggregate of tons of freight moved during the year was 14,318,317; an increase, as compared with 1873, of 2,047,412 tons, or 16.63 per cent. Six roads failed to report this item, but for purposes of comparison the amounts for the previous year have been inserted in the table for four of the roads, no data having been furnished for the other two roads for either year.

As will be seen from the following table, the character of the business done has varied but little from that of the previous year; the ratios in either case being only approximate, but sufficiently accurate for the purpose of comparison.

#### CLASSES OF FREIGHT CARRIED.

	1873.	1874.
Per cent.	Per cent.	
Cereals.....	11.54	15.15
Agricultural products, except grain.....	2.54	1.94
Flour.....	4.64	3.93
Provisions.....	2.99	2.37
Manufactures.....	2.96	2.18
Animals.....	5.78	5.17
Lumber and forest products.....	16.13	17.17
Coal.....	6.30	6.61
Iron and other ores.....	12.38	9.77
Stone and brick.....	1.40	1.46
Merchandise and other articles.....	32.72	29.54

#### EQUIPMENT.

The equipment reported for the various roads consists of 1,358 locomotives of all sizes, and a total of 31,254 cars; of which there were 604 passenger cars, 262 express and baggage cars, 14,667 box freight cars, 7,298 platform cars, and 8,476 ore and other cars.

Of locomotives equipped with the air brake there are 125, besides those of the Lake Shore & Michigan Southern, where all passenger trains are thus furnished. There are 482 passenger cars thus equipped. The "Westinghouse air brake" is in use on fourteen roads, and the "Ward air brake" on seven, while one of our roads, the Chicago, Detroit & Canada Grand Trunk Junction uses the "Smith vacuum brake." Six roads still use the common hand brake, their general business being done mostly by means of mixed trains.

#### STATIONS.

The total number of stations for all our roads is 1,252, of which 759 are in this State. This gives an average of one station for each 4½ miles of road.

#### PERSONS EMPLOYED.

The thirty-four corporations reporting to this office employ in the various branches of superintendence and work, 22,575 persons, of which 15,608 are employed in this State; being an average of four men to each mile of road.

#### FREIGHT TARIFF RATES.

As was surmised in my report for 1873, there has been a general and steady reduction in rates of freight during the year, among the most notable of which will be found the reports of the Lake Shore & Michigan Southern and the Michigan Central. The reduction of the average rate on the Lake Shore & Michigan Southern from 1.39 to 1.18 cents per ton per mile, a decrease of 0.155 of one cent per ton per mile, caused a loss in the net earnings of that company of \$1,549,079.59, or more than 3 per cent. upon its entire capital stock. The report of the Michigan Central shows a still greater reduction in rates, being from 1.57 to 1.03 cents, a decrease of 0.27 of one cent per ton per mile.

The report of the Detroit & Milwaukee shows a reduction on its through business from 9.7 mills to 7.6 mills per ton per mile.

While it has been usually considered that the cost of canal transportation was less than by rail, it will be seen by the following average of rates on the Erie Canal that at least one of our roads has been doing its business at a rate equally low. When we consider that the class of freight usually transported by canal is that which is always carried at the lowest rate, while the business by rail is general, including all classes of freight, it will be seen that the rates by rail, upon the same class of business, have been really less than by canal.

The Auditor of the Canal Department for the State of New York, in his report for 1872, gives the average rates per ton per mile for freight on the Erie Canal for the seventeen years from 1856 to 1872, inclusive; from which it is found that the average rate received by the carrier, including the State tolls, during those years, was 9.14 mills per ton per mile; and but one year during that time was the rate less than that received by the Detroit & Milwaukee Railroad in 1874 for their through business.

For their entire business, of which their local traffic constitutes nearly nine-tenths, the Lake Shore & Michigan Southern received but 11.8 mills per ton per mile, as against 9.14 mills,

the average canal rate. It seems, also, that this reduction of rates did not cease with 1874, for in its report for the half year ending July 1, 1875, the above-mentioned road shows its average rate to be 10.22 mills per ton per mile, as against 11.87 mills in 1874.

The average cost of transportation by the Erie Canal for the years 1871 and 1872, as shown by the report of the Canal Auditor of New York, for the year last named, was 10.2 mills per ton per mile, which is the same rate received by the Lake Shore & Michigan Southern during the first half of 1875 for its entire freight business done on both main line and branches.

The following, relative to rates on the Michigan Central, is taken from the report of its President, Jas. F. Joy, to the stockholders, for the year ending June 1, 1875:

"The rate per ton per mile on all freight carried shows the earning from every ton of freight, for every mile it is carried, and the reduction of this rate is the measure of the reduced earnings in each year. This rate for each ton carried one mile, averaging all the business, in 1865, ten years ago, was 3.06 cents. One year later it was 2.60 cents. Two years later still it was 2.09 cents. In 1870 it was 1.96 cents. Two years later it was 1.56 cents. In 1874 it was 1.30 cents; and last year it was reduced to 1.16 cents per ton per mile.

"The last figure, it is believed, is the lowest which has ever been reached for the average transportation for both local and through freight, on any road until the last year. It will now be seen what effect this has had upon the gross revenues of the road.

"The tonnage moved the last year was 1,641,280 tons. Could we have realized the rate per ton per mile which ruled in 1865, ten years ago, the earnings from this business would have been.....\$9,741,999 69  
While the real earnings were only.....3,692,267 01

A difference of.....\$6,049,732 68 which is more than seven 5 per cent. dividends lost."

I have cited the reduction of rates on the above-mentioned roads, as being the most prominent and doing a very large proportion of the business; but nearly all our roads show a marked decrease in their tariff rates, some of the others being as marked as those mentioned.

The results of this reduction of rates may be seen by even a casual observer of our railroad system. First, it has had the effect to deprive the stockholders of any dividends on their investment; second, it has compelled the companies to cease improving their property, by such additions as double track and steel rail,—improvements imperatively demanded in order that the companies may be able to successfully prosecute their business, not only in their own interest, but for the interest of their patrons; and third, it has brought about an extreme reduction in the expense of operating the roads, as is shown in the case of the Lake Shore & Michigan Southern, their operating expenses being \$2,594,226.98 less in 1874 than in 1873. Now while this may be, to a certain extent, beneficial, the fact must not be lost sight of that although the rates for carrying may continue to decrease, the expense of operating must find some limit beyond which it cannot be reduced. The expenditures for repairs and permanent improvements may be cut off for a single year, it may be, but the property must eventually receive such care as to bring the average to the mean of healthy and vigorous operation.

## General Railroad News.

### ANNUAL REPORTS.

#### Baltimore & Ohio.

This company owns or leases and works the following lines:

	Miles.
Main Stem, Baltimore to Wheeling, W. Va.....	379½
Valley Branch, Harper's Ferry to Harrisonburg.....	109
Washington County Branch, Junction to Hagerstown.....	24
Metropolitan Branch, Point of Rocks to Washington.....	42
Washington City & Point Lookout R. R., Alexandria Junction to Shepherd.....	12

Total, Main Stem and Branches.....	667½
Washington Branch, Relay House to Washington.....	31
Parkersburg Branch, Gratton, W. Va., to Parkersburg.....	109½
Central Ohio Division, Belleaire to Columbus.....	137
Lake Erie Division, Newark, O., to Sandusky.....	116
Chicago Division, Chicago Junction to Chicago.....	268
Wheeling, Pittsburgh & Baltimore, Wheeling to Washington, Pa.....	32
Newark, Somerset & Straitsville, Newark, O., to Shawnee.....	43

Total.....1,288

The Baltimore, Pittsburgh & Chicago line, which forms the Chicago Division, was not fully opened for traffic until Dec. 23, 1874, although 86 miles of it were worked during the preceding year. The company works under temporary agreement 26 miles of the Valley road, from Harrisonburg, Va., to Staunton, the earnings of which are not included here.

For the year ending Sept. 30, 1875, President Garrett's report gives the earnings and expenses of the various lines as follows:

	Earnings.	Expenses.	Net earnings, P. of or deficit, exp'n's.
Main stem and branches.....	\$10,514,178 97	\$6,181,972 80	\$4,332,206 47 58.80
Washington Brch.....	343,169 65	117,296 47	225,874 18 34.18
Parkersburg Br'n.....	635,031 70	766,217 87	\$181,186 17 120.66
Central Ohio Div.....	878,983 97	889,118 67	\$10,134 70 101.15
Lake Erie Div.....	870,625 94	667,676 01	\$202,949 93 76.70
Chicago Division.....	983,366 45	1,109,408 21	\$126,041 76 116.37
W., Pitts. & Balt. R. R.....	47,965 15	47,847 46	617 69 98.71
Newark, Somerset & Str. R. R.....	189,380 44	187,507 48	25,822 96 85.91
Totals.....	\$14,426,552 27	\$9,936,543 67	\$4,490,008 60 68.87

#### \* Deficit.

The report says: "The net revenue of the Main Stem and branches, including the Central Ohio, Lake Erie and Chicago Divisions, the Wheeling, Pittsburgh & Baltimore, and the Newark, Somerset & Straitsville railways is \$4,490,008.60. The aggregate working expenses of the Main Stem with all 'branches and divisions are 98.97 per cent. of the whole gross revenues, being 5.88 per cent. more than the preceding year.

"In view of the protracted and extraordinary inactivity of every branch of business, and the universal depression of manufacturing industries of the country, these results will be regarded with satisfaction. When further considered in combination with the united and prolonged attacks of the great trunk lines upon the business and interests of the Baltimore & Ohio Company, during which time rates entirely unremunerative were established for the transportation of freight, particularly between the seaboard and Western cities, the results are not only satisfactory, but gratifying.

"The Pennsylvania Railway Company offered rates from Baltimore for long periods which were so low as necessarily to involve large losses. This company, therefore, declined much business that was tendered to it, in Baltimore and elsewhere, on which the actual cost of transportation would have materially exceeded the gross revenue that could have been earned therefrom.

"The Baltimore & Ohio Company, with its powerful connections with Cincinnati, Chicago, St. Louis, Louisville, Columbus and Sandusky, and with Pittsburgh, Wheeling and Parkersburg on the Ohio River, and Staunton and Danville in the South, has proven its ability, under its exceptionally strong and prudent

financial system, to maintain its positions, vindicate its rights, and to accomplish good results for its shareholders."

#### MAIN STEM.

The earnings and expenses of the Main Stem and branches, 557½ miles, in detail were as follows:

	1873.	1874.	1875.
Earnings.....	\$12,252,843 78	\$11,693,955 55	\$10,514,178 97
EXPENSES.			
General expenses.....	\$104,130 33	\$122,742 22	\$123,689 89
Losses by accidents, etc.	63,445 63	55,374 33	53,108 56
Expenses of transportation.....	2,380,864 24	2,291,900 77	2,138,082 58
Repairs of railway.....	1,974,408 14	1,640,223 58	1,234,324 32
Repairs of water stations.....	65,538 86	34,974 99	19,487 59
Repairs and construction of depots.....	138,738 36	140,759 75	125,161 46
Repairs of bridges.....	259,953 89	245,822 24	116,934 43
Repairs of telegraph lines.....	29,772 67	38,913 13	21,225 26
Repairs of stationary machinery.....	212,261 78	165,720 12	131,920 69
Watching cuts.....	50,412 80	57,654 37	52,376 41
Watching tunnels.....	4,528 00	4,384 25	4,365 10
Watching bridges.....	14,485 90	23,287 87	23,456 78
Pumping water.....	31,350 78	32,951 53	33,558 12
Repairs of locomotives.....	659,091 83	598,384 30	630,397 01
Repairs of passenger cars.....	141,641 50	167,391 26	222,403 76
Repairs of burden cars.....	598,688 96	542,199 58	637,958 02
Cleaning engines and cars.....	131,984 47	131,874 30	132,562 84
Contingent expenses of the Machinery Department.....	8,168 37	8,289 45	7,022 88
Fuel.....	391,139 01	423,119 16	423,717 18
Preparing fuel and filling tenders.....	57,422 47	58,015 36	50,370 67
	\$7,318,047 79	\$6,875,895 26	\$6,181,972 80
Earnings more than expenses.....	\$4,934,795 99	\$5,018,060 29	\$4,332,206 47
Working expenses.....	59 72-100 p. ct.	57 8-100 p. ct.	58 79-100 p. ct.

It is shown that the earnings in comparison with the fiscal year 1874 have decreased \$1,179,776.68, and the working expenses \$493,922.76, making a comparative decrease in the net profits of \$685,853.82. Compared with the fiscal year 1873, the decrease of earnings being \$1,738,664.81, and of working expenses \$1,136,075.29, the decrease of net profits amounts to \$602,589.52.

The liabilities of the company were reduced during the year by the payment of the following securities:

First mortgage loan due 1875, balance.....	\$840,250
Loan of 1880.....	120,500
Loan of 1885.....	790,000
Northwestern Virginia bonds.....	360,000
Total.....	\$2,110,750

Payments of \$405,460 to the sinking fund of the sterling loans of 1865, 1902 and 1910 were made, and of \$99,220.22 to the sinking fund of the Baltimore City loan. The latter fund now amounts to \$1,747,973.42. During the year \$685,069.12 of the second series of 6 per cent. preferred stock was sold at par.

"The surplus fund of the company on 30th September, 1875, was \$34,023,566.83. The entire mortgage indebtedness in currency and sterling is \$28,716,334.58. It is thus shown that the surplus fund, representing capital derived from net earnings invested in its branch and connecting roads, and in the great improvements that have been continuously constructed on the Main Stem, which is not represented by either stock or bonds, exceeds the entire mortgage indebtedness of the company \$5,307,232.25. Semi-annual dividends of five per cent. upon the capital stock were paid on the 1st of November, 1874, and on the 1st of May, 1875, respectively.

"It is shown by the report of the Transportation Department that there has been a continued expansion of tonnage of through merchandise East and West, viz: From 752,256 tons in the preceding year to 872,101 tons; for 1873 this traffic was 640,265 tons; for 1872, 557,609 tons, and for 1871, 435,260 tons; 929,140 barrels of flour and 7,342,920 bushels of grain were brought to Baltimore during the fiscal year. The traffic in live stock has been 93,709 tons, showing an increase of 4,437 tons over 1874, and of 6,049 tons over 1873.

"The coal trade shows an aggregate of 1,972,087 tons, which includes 452,198 tons for the company's supply. The quantity transported for the public is 1,519,889 tons, showing a decrease compared with 1874 of 258,739 tons, and compared with 1873 of 499,829 tons.

"The prolonged and severe depression in manufacturing and steamship interests has again largely reduced the demand for coal, and resulted in the decrease of tonnage stated. In order to invite trade in this important article of transportation, the tariff was reduced on the 3d of March, 1875, 25 cents per ton, but the decreased consumption, from the cessation of operations by many important works, prevented its satisfactory development. A revival in the general business of the country will doubtless rapidly restore the demand for the superior coals bordering on our lines and lead to a great increase in this trade.

"The passenger earnings exhibit an increase from \$1,518,522.68 in the preceding year to \$1,613,239.24. This result is particularly satisfactory, as the rates during a large portion of the year were greatly reduced in connection with the railway conflict.

"During the year 295,939 new cross ties, 4,677 tons of iron and 5,526 tons of steel rails were used for repairs and the construction of additional tracks on the main line. The iron rails were made by the company at its rolling mill at Cumberland. During the year 9 engines, 25 palace and passenger cars, and 189 cars for general tonnage were purchased and built at the company's works. The cost of this new and additional equipment (\$358,257.44) has been charged to rolling power.

"It is shown by the particulars furnished in the report of the Master of Machinery that the equipment upon the Main Stem and branches consists of 558 locomotives, 341 passenger and baggage cars and 12,058 horse, stock and other cars.

"It will be seen that 5,526 tons of steel rails have been used during the past year upon the Main Stem. Five hundred and eighty-five miles of track are now laid with this durable and safe material. The increased cost of the large quantity of steel thus used in substitution for iron rails has been charged to the repair account. The economy and advantage of the substitution of steel for iron rails so generally upon the line are shown by the important reduction stated by the Road Department in the cost of the 'repairs of railway,' of \$305,899.26.

The earnings of the Washington Branch for the year were: \$343,169.65, showing a decrease of \$30,153.66, compared with the previous year, of \$97,605.89 compared with 1873, and of \$137,475.39 compared with 1872. The expenditures charged amount to \$117,295.47, being for improvements and for repairs of railway, depots, water stations, and bridges, and for pumping water.

"During the year 349 tons of steel were substituted for iron rails and 21,548 cross ties were used.

"As stated in former reports, the system was adopted by which the earnings were equitably divided upon a basis requiring all the expenses connected with transportation, the repair and use of machinery, and of the shops and stations of the company in Baltimore to be paid by the Main Stem, the expenses of the Road Department alone being charged to this road.

"The partial expenditures charged, deducted from the revenue stated, make the sum of \$225,874.18, showing a decrease



of net earnings, compared with the preceding year, of \$21,414.77—of \$38,139.74 compared with 1873, and of \$109,860.83 compared with 1872.

"A dividend of 5 per cent. was paid on the 21st of October, 1874, for the half year terminated September 30, 1874, and on the 17th of April, 1875, a similar dividend for the term ended March 31, 1875.

"On May 3 of this year the Supreme Court of the United States delivered an opinion in what is called the 'capitation-tax case,' sustaining the constitutionality of that provision of the Act of 1832, chapter 175, which requires the company to pay the State one-fifth of the whole amount received for the transportation of passengers on the Washington Branch.

"The amount of the judgment thus affirmed, with interest, was \$424,229.81, which sum was paid to the State Treasurer after the receipt of the opinion of the Court."

The report refers at length to this decision, and argues that the intention of the Legislature in imposing the tax at the time the charter was granted was to give in return an exclusive franchise. It is believed that the Legislature will take this view and will remove the tax.

The earnings of the Parkersburg Branch for the fiscal year were \$635,031.70, and the working expenses \$766,217.87; the earnings were \$167,034.83 less than in the previous year, while the expenses decreased \$176,035.11, showing a comparative net result of \$9,000.28 in the deficit less than in 1874. The unremunerative rates for transportation of much of the large through traffic upon the road, combined with the necessity for continued heavy expenditures for the improvement of the line (among which was the use of 2,684 tons of steel and iron rails), have again resulted in a large loss on the business of the year.

The report refers at length to the various improvements made during the year, which include 22.1 miles of new second, third and fourth tracks, the new wharves and warehouses at Locust Point, the new engine houses at Riverside and Camden Station, the coal shutes at Camden Junction, the new yard and buildings at Keyser and others, most of which we have from time to time described.

"The investments in new and additional works under the charge of the Road Department for the fiscal year amounted to \$1,017,245.22.

"On the 17th of June, 1875, the Baltimore & Ohio Company purchased from the City of Baltimore its interest in the Pittsburgh & Connellsville Railway Company, for \$1,000,000, being the sum originally loaned by the City of Baltimore to that company. The purchase money is to be paid as follows: \$40,000 on the 1st day of July in each year after the year 1875, until the 1st day of July, 1900, and in the meantime interest is to be paid semi-annually on the 1st day of July and January, on so much of the amount as may remain unpaid.

"In order to make this road, so valuable and important to the cities of Baltimore and Pittsburgh, effective, much work proved to be requisite. To prevent financial embarrassments and to aid in rapidly perfecting the work, this company has advanced in cash for the Pittsburgh & Connellsville Company \$5,685,923.38. The business of the line is now being established upon a permanent basis, and arrangements are being perfected for more intimate connections and the closest relations in working with the main stem. Under the proposed organization largely improved results may be reasonably anticipated.

#### THE BALTIMORE, PITTSBURGH & CHICAGO RAILWAY.

"In the last annual report it was stated that it was then expected that this entire road would be opened in November following. The track laying upon this line, which was commenced at Fostoria July 22, 1873, was completed from Chicago Junction to Baltimore Junction, a distance of 263 miles, on Nov. 15, 1874. In order to insure safety in operating much additional work was done, and the opening of the line for traffic from Dealer to Chicago, a distance of 200 miles, was deferred until Dec. 23. The winter proved to be of unusual severity in that region; the thermometer for frequent and protracted periods ranged from zero to 23 degrees below. Notwithstanding this extraordinary condition of the weather, and the recent construction of the road, the very satisfactory result was shown that there was not a single case of personal injury or an accident upon the line. In order to perfect the road and supply all needed facilities for prompt and economical shipment and transportation, large forces have been employed throughout the year to complete the ballasting, to slope and widen the cuts and embankments, to lay additional and second track, and to erect shops, depot structures, water stations and elevators.

"Forty acres of ground were purchased at Chicago Junction, 56 acres were donated at Garrett City and 40 acres at Kingston for depot grounds, machine shops, engine house, etc. At Chicago an engine house for sixteen engines, a machine and blacksmith shop, 70 by 150 feet, are being erected.

"At Garrett City an engine house for 32 engines, 264 feet in diameter; a machine shop 264 by 104 feet, a blacksmith shop 264 by 80 feet, a power house 30 by 50 feet, and other requisite buildings are being rapidly constructed and will be ready for use prior to January next. At Kingston an engine house for 16 engines; a machine shop, 150 by 70 feet, two stories in height; a power house 28 by 42 feet, and a blacksmith shop 100 by 70 feet have been completed. These buildings have all been constructed in the most permanent manner of brick, with slate roofs, and embrace all desirable improvements.

"In order to insure the rapid and economical coaling of engines, shutes, with pockets for storage of coal, have been erected at Dealer, Walkerton and Kingston, and are under construction at Chicago Junction and Garrett City.

"At Chicago Junction a brick structure, embracing requisite conveniences for dining and waiting rooms, with sleeping apartments for guests desiring to lie over, is nearly completed. "Fourteen grain elevators, with a capacity of from 10,000 to 24,000 bushels each, have been built at points along the line where they were needed. Transfer stations have been built at Defiance and Auburn, and one is now being erected at Dealer. An ice-house has been built at Syracuse Lake, with capacity to supply the passenger coaches of the entire line.

"In the city of Chicago a first-class brick freight warehouse, 600 feet in length by 55 feet in width, with slate roof, has been erected. Two hundred and fifty-five miles of fencing and 240 cattle guards have been built upon the line. A stock yard, with loading pens, has been built at Defiance, and many other stations upon the line have been supplied with similar conveniences.

"At Chicago connections have been made with the great stock yards, and active preparations for an extensive traffic in live stock have been completed; 61 tool and hand-car houses have been built; 19 frost-proof water stations, each with a capacity of 66,000 gallons, each with brick power house, and all supplied with pumping engines, have been erected; reservoirs have been built at Chicago Junction, Attica, New Baltimore, Dealer and Hamlet, with an estimated capacity of 10,740,000 gallons; a second track has been completed from Kingston to Baltimore Junction. Seventeen and a half miles of side tracks have been laid, and junction tracks built for the transfer of loaded cars with the following railway companies, viz.: At Tiffin, with the Cincinnati, Sandusky & Cleveland, and with the Toledo, Tiffin & Eastern railways; at Fostoria, with the Lake Erie & Louisville; at Dealer, with the Dayton & Michigan; at Defiance, with the Toledo, Wabash & Western; at Auburn Junction, with the Detroit, Eel River, Indiana and the Fort Wayne, Jackson & Saginaw; at Avilla, with the Grand Rapids & Indiana; at Milford, with the Cincinnati, Wabash & Michigan; at Walkerton, with the Indianapolis, Peru & Chicago; at Union Mills, with the Chicago & Lake Huron; at New Albany

crossing, with the Louisville, New Albany & Chicago; and at South Chicago, with the Chicago, Rock Island & Pacific railways.

"The amount expended for construction during the fiscal year, in providing the additional facilities described, and in perfecting this line was \$1,356,014.60.

"In order to organize an independent line of telegraph and thus, instead of having the telegraph service a source of large and constant expenditure, to make it a source of revenue, a first-class line, with two wires of the best galvanized iron, has been built upon the entire line between the Lake Erie Division and the City of Chicago.

Mr. Garrett says: "It is believed that the enormous losses thrown upon the roadways of the country by the injudicious assaults made upon the Baltimore & Ohio Company will cause a wiser policy to be generally adopted and maintained in the future.

"Such extreme irregularities and rates so unremunerative as were needlessly made have imperiled such vast interests and injured seriously so much railway property, that the lessons of the past year should not fail to secure hereafter a judicious and conservative policy.

"With the numerous improved and important connections recently constructed and secured, a large increase of traffic may be reasonably expected upon the restoration of the business of the country to its normal condition. With this prospect, combined with the economical advantages arising from the comparatively low price of labor and material, it has been deemed judicious to continue to enlarge the facilities and works of the company. Preparations have been thus made by which a greatly increased business can hereafter be effectively and economically done.

"The successful management of the business of the company requires the acknowledgment of the board to the officers and employees generally for their faithful and effective services."

#### Great Western, of Canada.

This company owns and works a main line from Suspension Bridge to Windsor, 229 miles; the Loop Line, from Glencoe to Welland Junction, 128½ miles; the Toronto Branch, 39 miles; Brantford Branch, 8 miles; Galt Branch, 12 miles; Sarnia Branch, 51 miles; Petrolia Branch, 5 miles; Allanburg Branch, 8½ miles; in all, 481 miles. It leases and works as part of the Loop Line 15 miles of the Welland Railway, making 496 miles in all. The Galt & Guelph road, 15½ miles; London & Port Stanley, 27 miles, and the Wellington, Grey & Bruce, 196 miles, are worked under lease, but only the net result from the whole 238½ miles is stated.

During the half year ending July 31 the receipts on capital were nominally \$480,234, but really, deducting discounts, \$224,471. Charges to capital account included \$44,299 for general purposes, \$48,521 invested in Wellington, Grey & Bruce bonds, and \$253,940 discounts. The capital account now stands as follows:

Receipts on capital account	\$2,404,593
Payments on capital account	8,883,547
Balance to credit	\$221,046
The revenue account for the half year was as follows:	
Gross receipts, reduced to gold basis	\$411,187
Working expenses, rentals and taxes	393,793
Net earnings	\$17,394
Interest on bonds and debenture stock	\$98,863
Loss on working leased lines	19,387
Depreciation account charge	6,500
	\$125,350
Deduct amount to credit of interest account	680
	124,669
Deficit for the half year	\$107,275
Add deficit from previous half year	34,238
Total	\$141,513

As compared with the corresponding half of 1874, there is a decrease of \$105,348, or 20.4 per cent., in gross earnings; a decrease of about \$42,000, or 9.6 per cent. in expenses, and of \$63,348, or 78.5 per cent., in net earnings. The expenses were 95.77 per cent. of the earnings, and the gross earnings were \$229 per mile. Of the loss on the leased lines \$16,101 was on the Wellington, Grey & Bruce, and resulted largely from the high cost of repairs, owing to the defects in the original construction of the line.

The locomotive, car, ferry steamer renewal and insurance funds show credits amounting to \$105,368. The change of gauge account has been finally adjusted and the last revenue charge to that account will be made in the current half year.

The earnings and working expenses per train mile compare during the last six half years as follows:

Half year ending	Earnings.	Working exp.
Jan. 31, 1873.	7s. 4½d.	5s. 1½d.
July 31, 1873.	7s. 1d.	5s. 2½d.
Jan. 31, 1874.	7s. 0½d.	5s. 2½d.
July 31, 1874.	6s. 3½d.	5s. 3½d.
Jan. 31, 1875.	6s. 8½d.	5s. 4½d.
July 31, 1875.	4s. 11½d.	4s. 9½d.

The earnings and working expenses for July, 1874, and July, 1875, are exactly reduced to a gold standard. Those of the other half years are approximate, but the difference will be slight.

Both the capital and revenue accounts are, for the first time, stated in sterling only reduced to a gold basis. They cannot, therefore, be in all respects compared with those of former half years; and this is especially the case with reference to the gross revenue receipts.

The receipts in American currency have been subject to a greater depreciation than in the corresponding period of 1874, the average rate of conversion having been 115½ as compared with 112½.

The policy of avoiding competition whenever possible, of strict economy in working and of curtailing capital expenditures has been strictly adhered to. The general depression of business and the interruption to the road and ferry from the exceedingly severe weather of last winter, together with the low rates on through business, account for the large decrease in earnings. The reduction in working expenses has been secured in spite of the fact that the passenger train mileage was only 4 per cent., and the freight train mileage 6 per cent., less than in 1874.

The road and equipment are in good condition and satisfactory progress is being made in the substitution of steel for iron in the track.

#### ELECTIONS AND APPOINTMENTS.

**Painesville & Youngstown.**—Mr. L. F. McAleer, formerly Superintendent and General Manager of the Connellsville (Pa.) National Locomotive Works, has been appointed Superintendent, in place of Mr. G. R. Crane.

**Louisville & Nashville.**—Mr. E. D. Standiford, President, has issued the following circular: "The office of the undersigned will continue to be at the corner of Main and Bullitt streets, Louisville, but for the transaction of business connected with the general management of the road will be at Ninth and Broadway. Mr. G. C. Breed, while continuing to act as Purchasing Agent, is appointed Secretary to the President, at last named office, through whom parties having business with me may communicate in my absence."

**Alexandria & Fredericksburg.**—At the annual meeting in Alexandria, Va., Nov. 11, the following directors were chosen:

Thomas A. Scott, W. J. Howard, J. P. Green, Albert Hewson, N. G. Ordway, W. T. Waters, G. C. Wilkins. The board elected G. B. Roberts President and Albert Hewson Secretary and Treasurer.

**European & North American.**—Mr. A. T. Thompson has been appointed Auditor. He has been for some years past Assistant Treasurer of the Maine Central.

**Michigan Central.**—Mr. C. F. Livermore has been chosen Treasurer in place of his father, Mr. Isaac Livermore, who has resigned. He has been local Treasurer in Detroit for some years.

**Burlington & Missouri River in Nebraska.**—Mr. Charles Piers has been appointed General Freight and Ticket Agent in place of W. D. Cowles, deceased.

**Camden & Burlington County.**—Mr. Wm. H. Gatzmer has been chosen a director in place of Albert W. Markley, deceased.

**Intercolonial.**—Mr. Willard Hutchinson has been appointed Track Master of the new Northern Division, and will have charge from Moncton, N. B., to Miramichi. Mr. D. D. McDonald has been appointed Track Master of the section from Miramichi to Campbellton.

**Michigan Central.**—S. H. Edgerly, formerly foreman of the Chicago, Burlington & Quincy locomotive shops in Aurora, has been appointed Master Mechanic at the Jackson shops.

**Chicago & Northwestern.**—Mr. Charles G. Eddy has been appointed Assistant General Freight Agent of this company, for the Galena and Iowa divisions and branches thereof, and William S. Mellen to the same position, for the Wisconsin, Milwaukee, Peninsula, Kenosha and Madison divisions, and Winona & St. Peter Railroad, offices at Chicago, Ill., in place of C. M. Wicker, resigned. The appointments took effect Nov. 1.

**Utica & Black River.**—At the annual meeting in Utica, N. Y., Nov. 10, the following directors were chosen: DeWitt C. West, John Thorn, Robert Lenox, Kennedy, James Sayre, Theodore S. Faxton, Isaac Maynard, Edmund A. Graham, William J. Bacon, Russell Wheeler, Lewis Lawrence, Abijah J. Williams, Daniel B. Goodwin, Abram G. Brower. Inspectors of Election, Alrick Hubbell, Charles Hurlburt, Charles P. Leonard. The board subsequently elected the following officers: President, DeWitt C. West; Vice-President, John Thorn; Treasurer, Isaac Maynard; Secretary, W. E. Hopkins; Executive Committee, John Thorn, E. A. Graham, Isaac Maynard, Russell Wheeler and A. J. Williams.

**Whiteoak Valley.**—The United States District Court at Indianapolis has appointed Henry Parkman, Receiver.

**Kansas & Missouri Bridge.**—Hon. H. W. Grant, of Davenport, Ia., has been appointed Receiver.

**James River & Kanawha Canal.**—At the annual meeting in Richmond, Va., last week, Maj. C. S. Carrington was re-elected President. Col. Cabell and Judge Meredith were chosen directors on behalf of the stockholders.

**Third Avenue.**—The new board of directors of this New York street railroad company has elected Samuel L. Phillips, President; Henry Hart, Vice-President; Charles S. Arthur, Secretary and Treasurer. It is understood that J. W. Fields will continue to be Superintendent.

**Baltimore & Ohio.**—At the annual meeting in Baltimore, Nov. 15, the following gentlemen were unanimously re-elected directors on the part of the stockholders, 42,179 shares being voted on: Francis Burns, Galloway Cheston, John Gregg, James Harvey, Francis T. King, John King, Jr., Samuel Kirby, G. A. Von Lingen, John Spear Nicholas, C. Oliver O'Donnell, Samuel W. Smith, Wm. W. Taylor.

**Union Ferry Company.**—At the annual meeting in Brooklyn, N. Y., Nov. 16, the following directors were chosen: Charles E. Bill, S. B. Chittenden, Horace B. Claflin, James A. Degrauw, Walter N. Degrauw, Edward Dodge, James How, Abiel A. Low, Nathan P. Morse, Joseph A. Perry, Henry E. Pierrepont, Cyrus P. Smith, James S. T. Stranahan, Henry R. Worthington, Abraham B. Baylis.

**Atlanta & Richmond Air Line.**—Mr. Charles M. Crump, late Assistant Auditor, has been appointed Auditor and Secretary.

#### PERSONAL.

—Mr. Isaac Livermore has resigned the office of Treasurer of the Michigan Central Railroad Company, which he has held for 22 years past.

—Mr. Thomas G. Westcote, Engineer of the South Mountain Railroad, died at Orwigsburg, Pa., Oct. 27, of typhoid fever.

—The Indianapolis Journal says: "It is stated that A. B. Southard, recently Superintendent of the Detroit, Eel River & Illinois road, is to take an important position with the Toledo, Wabash & Western, on Dec. 1.

—Maj. George W. Grice, President of the Raleigh & Gaston and the Raleigh & Augusta Air Line companies, died very suddenly at his residence in Portsmouth, Va., Nov. 11, in the 53d year of his age. He was only elected to his late position a few weeks since, and was making arrangements to move his family to Raleigh, N. C., at the time of his death. Major Grice was a well-known and prosperous citizen of Portsmouth, where, or in Norfolk, he had resided all his life, was President of the Union Car Company and a director of the Seaboard & Roanoke.

—Mr. W. R. Woodard has resigned his position as Assistant General Superintendent of the Ohio & Mississippi Railway.

—The Indianapolis Sentinel, noting the appointment of Mr. G. C. Breed to be Secretary to the President of the Louisville & Nashville Company, and quoting a comment from the Louisville Courier-Journal thereon, says: "The above is a very just and deserved compliment to a worthy man. Mr. Breed is one of the most competent railroad men we know in this country, and our acquaintance with this class of men is very extensive. Mr. Breed is thorough in all the departments of railroad service, from the moving of trains to the higher branches of engineering, is a polished gentleman, a man of varied learning and accomplishments, and one of the most scholarly railroad writers in the country. President Standiford has done a very graceful thing in this appointment, and one that will reflect great credit upon his administration of the affairs of the great corporation of which he is the head."

—Mr. Breed has been an engineer, an auditor, a general freight agent and a general ticket agent, as well as a purchasing agent.

—Mr. Samuel V. Farwell, formerly of Utica, N. Y., Vice-President of the Flint & Pere Marquette Railroad Company, died in East Saginaw, Mich., Nov. 17. He has been connected with the company as director or Vice-President for several years past.

#### The National Bridge & Iron Works.

Messrs. C. H. Parker & Co., of the National Bridge & Iron Works, Boston, last month made an assignment, on account of the withdrawal of the financial partner of the firm. The assignees are J. R. Smith (of A. D. Briggs & Co., Springfield), F. A. Houdlette, the Bay State Iron Works and H. W. Kittredge. They will complete the outstanding contracts which amount to some \$110,000, and on which considerable work has been done, and will close up the business for the benefit of the creditors. Nearly all of the latter are said to have accepted this arrangement as the best possible under the circumstances.





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## Editorial Announcements.

**Addresses.**—Business letters should be addressed and drafts made payable to THE RAILROAD GAZETTE. Communications for the attention of the Editors should be addressed EDITOR RAILROAD GAZETTE.

**Passes.**—All persons connected with this paper are forbidden to ask for passes under any circumstances, and we will be thankful to have any act of the kind reported to this office.

**Advertisements.**—We wish it distinctly understood that we will entertain no proposition to publish anything in this journal for pay, EXCEPT IN THE ADVERTISING COLUMNS. We give in our editorial columns OUR OWN opinions, and those only, and in our news columns present only such matter as we consider interesting and important to our readers. Those who wish to recommend their inventions, machinery, supplies, financial schemes, etc., to our readers can do so fully in our advertising columns, but it is useless to ask us to recommend them editorially, either for money or in consideration of advertising patronage.

**Contributions.**—Subscribers and others will materially assist us in making our news accurate and complete if they will send us early information of events which take place under their observation, such as changes in railroad officers, organizations and changes of companies, the letting, progress and completion of contracts for new works or important improvements of old ones, experiments in the construction of roads and machinery and in their management, particulars as to the business of railroads, and suggestions as to its improvement. Discussions of subjects pertaining to ALL DEPARTMENTS of railroad business by men practically acquainted with them are especially desired. Officers will oblige us by forwarding early copies of notices of meetings, elections, appointments, and especially annual reports, some notice of all of which will be published.

## THE BALTIMORE &amp; OHIO RAILROAD.

The annual report of this important company is of more than usual interest this year, for the reason that this is the first year that the company has had an independent line to Chicago, and further because of the great competitive conflict in which it was one of the chief parties.

A comparison of the gross receipts of the company, as given in the abstract of the report elsewhere published, does not give any sufficient idea of the course of business, because the road was a very different thing this year from what it has been heretofore. Though a part of the Chicago extension was worked the previous year, it was not till last December that it was opened to Chicago; and as the sole object of the road was to secure Chicago business, there being scarcely any towns on the line, and therefore little local traffic, and that little strongly competed for, no idea of the value of this road, in itself and as a feeder of the old road, could be formed until this year.

The entire average length of the roads worked by the company was about 1,012 miles in 1873-74, and 1,224 miles last year, the increase in average mileage worked being about 21 per cent. We should bear this in mind when considering the fluctuations in gross and net earnings and expenses.

The gross receipts for the year 1874-75 were less by \$520,000 than the previous year, a decrease of less than 3½ per cent.; but the reduction in receipts per mile of road, as was to be expected, was much greater. For the earlier year these earnings per mile were \$14,770; for the later \$11,786; and the decrease of \$2,984 is at the rate of 20 per cent., and the decrease in earnings per mile since 1872-73 is about 25 per cent.

The decrease in earnings per mile is, however, always to be expected when an extension is made with less traffic than the old road, and need not necessarily be a misfortune. If only the net result of the business of the extension has been an addition to the revenues to the company, it has justified itself. Last year, the net revenue of the whole system of railroads was \$4,490,008, against \$5,530,440 the previous year, showing a reduction of \$1,040,432, or nearly 19 per cent. The net earnings per mile of road fell from \$5,465 to \$3,670, a decrease of nearly 33 per cent.

The Baltimore, Pittsburgh & Chicago Railroad, which forms the new Chicago connection, has its earnings and expenses reported separately. Being a new road, it could not reasonably be expected

to have a very large traffic, and nearly all its traffic being through, its earnings were affected more by the competitive conflict than those of any other single line in the country, doubtless. The average length worked during the year was about 223 miles. Its gross receipts were \$953,366, or at the rate of \$4,275 per mile—not light earnings for a new road; but its expenses were \$1,109,408, or \$156,042 more than the receipts, the road having been worked at a loss, which under the circumstances was to be expected. The through traffic of the company was largely increased—about 16 per cent.—and this new line doubtless had some effect in this, though not so much as the carrying at rates less than cost, which stimulated traffic; but the increase the previous year was nearly 20 per cent., so that the growth was the continuation of an old movement, and not the creation of a new one.

On the face of the returns, then, the Chicago extension would seem to be a failure; but it is impossible to decide from the first year's traffic; and there are facts to show that some very important work, or work that may turn out to be important and profitable, has been done by this year's work of the road that did not return any profits or any income whatever. In the first place, it has established for itself a position as a carrier—a difficult thing for a new road to do in the midst of a number of old, thoroughly-established competitors with relations existing throughout a vast territory of customers. By the railroad war the Baltimore & Ohio became pretty thoroughly known throughout the Northwest; and though the war was undoubtedly costly, perhaps the introduction, on the whole favorable, which it gave to this road was hardly attainable otherwise, under the circumstances. Then we cannot say how much smaller the traffic of the other lines of the company might not have been but for this Chicago connection, nor how much it may increase their business hereafter. Probably last year their gross receipts were increased considerably by the traffic contributed by the Chicago line; but in all probability their net earnings were not increased but somewhat decreased by this traffic, which at the rates obtained could hardly have been profitable. But this traffic is no longer unprofitable, and doubtless will not be hereafter, on the whole. Certainly competitive contests like that of the past season cannot be permanent, for the reason that they would ruin all the parties concerned; and whenever there is a profit on Chicago business the Baltimore & Ohio will doubtless get a share of it, as it has this year had a share of the losses.

Moreover, this road heretofore has not been fully utilized. So long as the company was in conflict with all the New York roads it could get no appreciable share of the New York traffic, but must depend almost entirely on Baltimore traffic. But this difficulty is already remedied. The Baltimore, Pittsburgh & Chicago Railroad is now a section of a leading New York line, as well as of a Baltimore line, and whatever it gets in its new capacity will be a clear addition, nearly, to the Baltimore traffic which it has had heretofore. The passenger business by this new route is now fairly begun, but preparations are not yet quite completed for the freight traffic. How important that may be we can judge from the fact that heretofore the Baltimore, Pittsburgh & Chicago has had hardly any live stock traffic from Chicago—a business in amount only second to the grain traffic, and the only through business from Chicago that has been profitable throughout the past season. The making of the road part of a New York route at once gives it an opportunity to share this traffic, especially as its Eastern connection is now the greatest carrier of live stock to New York.

This we have said to prevent the hasty deduction that because the new Chicago line's expenses last year were a sixth more than its receipts, not counting interest on its cost, therefore it was an unwise investment. We will not say that the Baltimore & Ohio could not have done better by a contract with one of the old roads than by making a new one, only the first year's result does not prove it.

One thing the report does show pretty clearly, however, and that is that the railroad war was disastrous to the road, and that the rates at which traffic was carried during the conflict were positively unprofitable. This Chicago Division, on which little but through business was done, lost nearly \$600 per mile during the year, besides the interest on its cost—some \$2,000 a mile more—though the extremely low rates did not prevail more than half of the year. The net earnings of the whole system of roads, having in the aggregate an increase of traffic so far as the report shows, were reduced by 19 per cent., in spite of a much larger mileage worked. In view of this fact, it is easy to understand why the company co-operates in efforts to maintain rates. There has been some complaint in the Northwest that the company is violating its principles and promises by consenting to a tariff as high as those now in force or the higher ones expected after the close of navigation. But we do not know that this company ever desired the low rates received during the conflict. It reduced rates and competed for traffic at un-

profitable rates, it is true, just as all companies do, and usually must necessarily do, when a contest has begun, for whatever purpose or by whatever party. But even if it had been in favor of the low rates of last spring and summer, the result of the business has been a sufficient reason for a change of opinion and policy. It got a large traffic, it is true, and was able doubtless to conduct its business at a smaller average expense per ton and per passenger per mile than ever before; but, notwithstanding, its net income fell of nearly one fifth.

We have again to regret that this company does not report the amount of its traffic—the number of tons and passengers carried one mile. The absence of such returns makes it impossible to compare the cost of doing any given amount of work on this road with that on other trunk lines.

## A Scotch Opinion on Erie Reorganization.

A few weeks ago we chronicled the holding of a meeting of Erie first-mortgage bondholders in Dundee, Scotland, at which certain resolutions were passed and a committee was appointed to confer with the London committee of bond and stockholders, which latter is the agency through which Sir Edward Watkin and Mr. Morris were sent to America. In English papers of October 30 we find a letter from this Dundee committee, addressed to the London committee, which latter has now to report a plan of reorganization.

In the many scores of pages that have been written in Great Britain and published in London financial journals on the Erie Railway, we have seen nothing that compares with this letter for just appreciation of the condition and necessities of the property, as well as of the equities of the different classes of proprietors and creditors. It is, too, an admirably written document, clear, forcible, earnest, and, it seems to us, convincing. That it is convincing to us, however, perhaps is partly due to the fact that it recommends the policy that we have always indicated in treating of this company's difficulties, namely, a reduction rather than an increase of the capital account, the thorough improvement of the road to enable it to do a larger work at a less average cost, and a contribution from the shareholders to the capital of the company as a condition of their retaining their interest and preventing foreclosure. They show the folly of the requirement attributed to Sir Edward Watkin, that if the Receiver cannot work the road for 65 per cent. of the receipts he should make way for another, and point out the impossibility of working an inferior railroad like the Erie as cheaply as one brought into the highest condition by the free expenditure of capital, like the New York Central. They quote Mr. James F. Joy's Michigan Central report to explain the improbability of any considerable or permanent increase of rates, and the consequent necessity, if good profits are to be had, of carrying a very large traffic and having the appliances for carrying it economically. Then they show that the Erie has not had such an increase of traffic as its competitors, and give the figures for gross receipts of 1868-69 and the last year, showing that in that period Erie receipts increased but 8 per cent., to the Pennsylvania's 31 per cent. and the New York Central's 32 per cent. "Experience seems to point," say they, "to the conclusion that the truest economy would be by a speedy but careful expenditure to raise the condition of the road from 'average' to 'first class.' Then we would be willing to say: 'Mr. Jewett, we have spent this year \$5,000,000 in laying a third rail, in steel rails and in increase of equipment; in return for these we will expect you to give us at least \$700,000 or \$800,000 more net revenue,' but till then we should be contented with much smaller results than working at 65 per cent."

The proposition which this Scotch committee suggests is that there be a friendly foreclosure; that the stockholders contribute \$8 or \$10 a share to clear off the floating debt and improve the road (this would supply \$6,600,000 to \$8,600,000); that the first-mortgage bondholders accept 6 per cent. instead of 7 per cent. for five years, and the second bondholders 4 per cent. for that time. Then the yearly interest charge would be reduced to \$2,910,000 gold, which is considerably less than the earnings of the road during its worst year.

Besides the capital coming from the shareholders' contributions, by this arrangement the bondholders would contribute \$900,000 a year for five years to the improvement of the property, by giving up part of their interest, and of this \$732,000 would come by the reduction from 7 to 4 per cent. of the rate of interest on the \$24,400,000 of the recent issues of bonds, which not only are an inferior lien, but were for the most part issued at very low prices.

In the Scotch committee's letter the old first, second, third, fourth and fifth mortgages and the Buffalo Branch mortgage are lumped together as "currencies at 7 per cent.," the convertible sterling loan and first consolidated mortgage as "firsts, at 6 per cent.," and the convertible gold and the second consolidated mortgage as "seconds, at 4 per cent." The first class, which are really the first mortgage, are not called upon to make any reduction,



being abundantly secured, and having had their interest paid promptly heretofore. And generally in the talk of reorganization, these old issues seem to be left out of the account, as having necessarily to be provided for, and when first-mortgage bonds are spoken of the convertible sterling loan and the first consolidated, both issued since the Gould administration, are meant.

Really, under such an arrangement, it would seem that the Erie might become a sound and profitable property again. The proposition, however, is not a definite plan, but simply a suggestion to the London committee, which has to prepare a plan. The only English comment on it is that we have seen is that it will probably be impossible to induce the holders of the shares to make any advances. We fear this is true; but from the tone of the Dundee letter and the terms of the first consolidated mortgage, there is reason to think that this may result in the elimination of the stock from the capital account by a foreclosure and the reorganization of the company wholly in the control of the bondholders or of certain classes of them. This Scotch letter, however, may open the shareholders' eyes, especially if it is followed by some decided action.

#### The Great Western of Canada.

This company's report for the half year ending with July last shows a most unfortunate condition of business. With receipts amounting to £411,187, the working expenses, rents and taxes were £393,793, or nearly 96 per cent., and only £17,394 was left as net earnings of the company's own property, while this was more than absorbed by the loss of £19,987 in working leased lines; so that nothing whatever was earned to meet the £38,882 of interest on bonds and debenture stock. On the whole, after paying these interest charges and putting aside the ordinary charge for depreciation account, the result of this half-year's business to the shareholders who own the road was a net loss of £107,275, which, added to the deficit at the beginning of the half year, gives a loss to the company of £141,563 on the business of the year—losses which have been paid, by the way, and not falling upon bondholders and other creditors; the company having met its losses out of money supplied by the sale of new shares. A business which requires contributions to pay its expenses instead of bringing in an income is not very satisfactory, of course, but for the past year the Great Western Company has had just such a business. And its bad returns have not been due to an excessive debt and consequent large interest payments. These payments are considerable, but the actual expense of working the road and its leased branches exceeded by £2,593 the total receipts from that business; which for an old and once profitable system of railroads with a very heavy traffic is, so far as we know, without parallel.

The explanation is not difficult, however; the management doubtless made a mistake some years ago by increasing the capital expenditure largely by constructing the "Loop Line" and leasing unprofitable branches; but the great cause of the road's decline in net earnings is the great reduction in the prices received for its work, while at the same time business has somewhat decreased. For the corresponding half-year of 1874—itsself a disastrous year—the earnings were greater by more than a quarter; yet the decrease in the amount of traffic since that time was not great. Receipts from through passengers fell off 20 per cent., but the number of passengers was only 8 per cent. less; so the through freight fell off but 7½ per cent., while the receipts from it were less by 25 per cent. At the rates obtained no longer ago than 1873, the net receipts of the road would have been eight times as great as they really were.

The company's great progress in reducing expenses would probably bring the officers much credit, had it sufficed to avert the losses; they deserve it quite as much, however. These expenses were less by 12½ per cent. than in 1874, and the expenses per train mile were reduced from 5s. 3½d. to 4s. 9½d.—the latter being the lowest for years, the average size of trains having been increased meanwhile. The directors give hopes of reducing these expenses still further somewhat, but probably they cannot go much further in this direction. The prices of labor and materials are more likely to rise than fall hereafter, and future savings must come chiefly by better administration. The improvement in the condition of the company, if it comes at all, must come chiefly from better rates or a heavier business, or both. Better rates the company has begun to get, and should also be having a heavier business; but the reports of earnings so far (they come here by way of London, and therefore are old when we get them) do not show it. The reported weekly receipts have been for many months without exception, we believe, considerably less than the very poor receipts of 1874. However, this company has a very large share of the through traffic between the East and the West, and in any improvement of that traffic it cannot fail to partake. At this time it seems probable that the traffic will be both larger and more profitable than at any time previous since the panic. Certainly this company cannot go on long with the condition of business described in this report, necessitating a contribution of about a million of dollars yearly to save it from bankruptcy. But this probably is true of some other important companies in America. Carrying traffic at a loss naturally will bring any railroad to grief. The Great Western more than most companies depends on through traffic, and so has probably been more injured than other companies by the excessive reductions in rates.

#### The Keokuk & Kansas City Railway Loan.

The Keokuk & Kansas City Railway Company obtained an undesirable notoriety in England near the end of last month, in connection with an attempt made to negotiate an issue of \$500,000 of its bonds by a financial institution known as the

Co-operative Credit Bank. The *Times*, when the prospectus of the loan was published, investigated this institution, and apparently proved that it was a sham, carrying on a sort of confidence business, with little or no capital. The prospectus of the loan, as we find it in the London papers of Oct. 30, differs in character very little from the scores of other prospectuses of the loans of new American railroad companies with which London papers were filled a few years ago, except that each purchaser of a bond of the Keokuk & Kansas City was promised a bonus in the company's stock equal to 10 per cent. of the bond; that vacancies in the board of directors for three members were left to be filled by the bondholders in England, and they were to have the same right to vote as the shareholders at all elections, provided the Legislature of Missouri could be induced to grant the necessary authority; and that it was promised that an English trustee should be appointed to guard the bondholders' interests. Another peculiarity was the offering of bonds for very small sums—\$25, \$100 and \$250, as well as \$500 and \$1,000, which latter are the only denominations usual when bonds are sold in England. So far as we knew, the truth was told in describing the present condition of the road. The advertisement said that there was 15¼ miles (Glasgow, Mo., to Salisbury) in operation, and 20 miles beyond Glasgow nearly ready for the iron, and that the whole line when completed from Keokuk to Kansas City would be 225 miles long. The whole issue was to be \$5,000,000, or at the rate of \$22,200 per mile. Very little was said of the probable traffic and profits of the road, further than a statement that the report of the Engineer-in-Chief, Mr. Oswald Younghusband, a member of the Institute of Civil Engineers, "demonstrates that the proceeds of the bonds will be amply sufficient for the completion and full equipment of the division between Salisbury and Kansas City; that in consequence of its judicious location it can be worked at a very moderate cost; and that through opening up a richly settled agricultural and mineral section of the State of Missouri, the net receipts from the traffic will be amply sufficient, on completion of the road, to pay the interest on the debenture," while elsewhere, of the shares to be given as a bonus, it is said that "it is calculated" that these shares "will, within four years from completion of the road, be earning a dividend of at least 4 per cent. annually." A list of directors is given; most of them being bankers in Missouri and Iowa. Mr. Samuel H. Melvin, of Springfield, Ill., under whose Presidency the Gilman, Clinton & Springfield Railroad was completed, is named as President.

The route of this railroad is a favorable one, or would be if North Missouri were still unprovided with railroads. It would make a section of a short route between Chicago and Kansas City, and there is a great deal of traffic between these two cities, and some good country on the route in Missouri. Unfortunately, this large traffic is already too much divided to afford a fair support to the railroads now competing for it. When there was but one route between Chicago and Kansas City, and the Hannibal & St. Joseph had all the traffic, in the days when armies of immigrants were pouring into Kansas, this traffic was very profitable; but it was so eagerly coveted that in a few years three new routes were opened, and at least two of these do not nearly earn the interest on their cost, while the Hannibal & St. Joseph, which formerly fattened on this traffic, now pays no dividends. Still many a worse project was carried through in the days of our railroad fever; and the chief difference in the character of an issue of the kind now is that it is offered at a time when the unsoundness of most of these new railroads has been practically demonstrated, so that projectors are less easily justified in having confidence in similar schemes, and more readily suspected of intending to make their profits out of the construction of the road, without caring whether it earns enough to pay interest on its debt.

#### New Jersey Midland Reorganization.

The New Jersey Midland bondholders have another plan of reorganization proposed to them, by which all classes of securities except the first-mortgage bonds are ignored, and the amount to be raised for clearing off the debts prior to the mortgage and putting the road in order is limited to \$350,000. The first-mortgage bondholders are to have new bonds with stock attached issued to them, so that the possibility of the control of the road escaping from them is prevented, and this seems a good feature. But on the whole the scheme does not otherwise differ much from the Balesier plan, for the so-called "income bonds," which by the latter scheme are to be given for the inferior securities, are in reality deferred stock, having no votes to control the company, and no claim for interest until dividends have been paid on the stock as well as interest on the bonds to be issued for the present first-mortgage bonds, which is so remote a claim that it can hardly be said to have any effect on the value of the other stocks and bonds.

In any reorganization of the kind, the difficulty of harmonizing conflicting interests and opinions is such that it is often not possible to carry into effect the best scheme, and unless all these circumstances are known, it is not proper to condemn or approve decidedly any plan. First of all it is necessary to unite enough bondholders in support of one plan to secure its adoption, and it often requires sacrifices to do this. If the Balesier plan of issuing income bonds to inferior securities, ranking after the stock, withdraws any considerable opposition, there should not be much objection to it; but the new scheme's project for making the shares inseparable from the bonds might prevent the necessity of another reorganization in the not very improbable contingency that the company fail to earn interest on the bonds issued to the first-mortgage bondholders. In that case, all that could be got by foreclosure would be the possession of the road, which the bondholders would already have by their inseparable stock. True, the Balesier plan secures the same condition, if the bondholders all keep their stock.

We venture to suggest, however, that in any case, the securities which the first-mortgage bondholders receive in a reorgan-

ization, whatever their name, will have and can have no greater security than a share capital. If they have nothing but stock, it will receive all the profits of the road, and that is all that an issue of bonds can get. If new capital is needed, it can only be got by giving it a first lien on the road, and then the paper now given to bondholders could only take the profits left after paying interest on the new capital, and it would take that whether in the form of shares or a second mortgage. To be sure, if the company should incur a large floating debt and then become bankrupt, the floating debt would rank below a mortgage and above stock; but we presume the company will not be able to incur any considerable floating debt until after its soundness has been demonstrated.

Another mistake easily made is the underestimation of the amount of new capital needed. Wherever there is a considerable traffic that must be taken in tolerably fast trains, such as the milk and passenger traffic of the Midland, a poor road is most wasteful.

#### Record of New Railroad Construction.

This number of the *Railroad Gazette* has information of the laying of track on new railroads as follows:

*Delaware Shore.*—The first track is laid, from the West Jersey road at Woodbury, N. J., west to Paulsboro, 5 miles.

*Emmitsburg Branch.*—Completed from the Western Maryland road at Rocky Ridge northward to Emmitsburg, Md., 7 miles.

*Lafayette, Muncie & Bloomington.*—Extended from Tipton, Ind., west to Frankfort, 25 miles.

*West End Narrow Gauge.*—The track on this narrow-gauge suburban line has been laid from Grand avenue, St. Louis, westward to Normandy, 8 miles.

*Iowa Eastern.*—Extended 3½ miles, to Elkader, Ia. It is of 3-foot gauge and two miles of the extension are laid with wooden rails.

This is a total of 48½ miles of new railroad, making 1,128 miles completed in the United States in 1875, against 1,594 miles reported for the same period in 1874, 3,228 miles in 1873, 5,982 in 1872.

#### Calling Out the Names of Stations.

TO THE EDITOR OF THE RAILROAD GAZETTE:

The following extract from a letter will explain itself. The ladies were paying a visit to Sewickley, Pa., on the Pittsburgh, Fort Wayne & Chicago Railway, and came very near being carried past because they did not recognize the name when "called out." They were requested to note the way in which this thing was done on their return. All whom it may concern will note whether this is the way in which it should be done, or whether there is not room for improvement:

"I must tell you of our experience trying to distinguish the names of the stations between 'Quaker Valley' and 'Rochester.' The first one was an inarticulate roar for 'Quaker Valley.'"

2. 'What'll you chew up' for 'Edgeworth.'
3. 'Shields' for 'Shields.'
4. 'Peachville' for 'Leetsdale.'
5. 'Hair Oils' for 'Fair Oaks.'
6. 'Ecaunemy' for 'Economy.'
7. 'Legionville' for 'Legionville.'
8. 'Blawba' for 'Logans.'
9. 'Filmore' for 'Linmore.'
10. 'Blunder' for 'Baden.'
11. 'Remington' for 'Remington.'
12. 'Freedom' for 'Freedom.'

"We listened with all our ears: this was the best we could do."

The fault may not be all on one side; but it will be admitted by every one that "an inarticulate roar" thrown into the open door, amid the rattle of wheels, creaking of brakes and other miscellaneous noises too numerous to mention, is not the best way to inform "a casual" of the name of the station, whatever may be true of the season-ticket holder, or the man who knows it without being told. Wouldn't calling out the names between stations be a better opportunity to make yourself understood?

Yours, in behalf of "the unprotected female" and "stranger in these parts."

#### The Dundee Committee on the Erie.

The following letter was addressed to the London bond and stockholders' committee now entrusted with making a plan for reorganization by a committee appointed at a meeting of first-mortgage bondholders in Dundee, Scotland:

DUNDEE, Oct. 24, 1875.

To the Members of the London Consulting Committee:

GENTLEMEN.—In view of the fourth resolution adopted at the late meeting of the bond and shareholders of the Erie Railway Company, presided over by Sir Edward Watkin, it may not be considered out of place on the part of the Dundee committee of first-mortgage bondholders to transmit to the individual members of the London consulting committee an expression of views very generally shared in by all classes of interest in this part of the country. The objects of your appointment are, as we understand them, to devise such measures as will at the earliest possible date accomplish these results, viz.: A re-arrangement of capital account on such a basis as will place the road in a solvent position, and so allow its affairs to be administered by its proprietors, instead of by courts of law. An increase in its business, and especially of its net revenue. A proper understanding of the principles which must govern the accomplishment of the latter seem to us a *sine qua non* to a wise devising of the former, and therefore we will first refer to it. One speaker at the meeting of bond and shareholders held on the 30th, if our Scotch reports of the proceedings are accurate, said that if Mr. Jewett could not work the line for 65 per cent. of its gross earnings another must be found who can produce this result. For ourselves, we must say that when it is considered that the New York Central—which, instead of crossing the mountains like Erie, runs almost all the way parallel with the Hudson River and the Erie Canal, and is thus practically free from expensive gradients—with its level road, its quadruple steel track of the standard gauge, its enormous traffic, and the close personal supervision and proverbially economical management of the President and directors, who



are also the chief proprietors—when it is considered that such a concern is not worked for less than 60 per cent., we cannot but entertain the gravest doubts as to any management, however efficient, being able to work Erie with a closed capital account, with its present traffic and in its present condition, at the rate referred to. One of our number had an opportunity two years ago of talking with Mr. W. H. Vanderbilt on this very subject. His words are now noteworthy. "If Erie," said he, "can earn interest on its bonds (then much less in amount than at present), Central can pay a dividend on its stock through the mere saving in working expenses. Erie, with its broad gauge and heavy grades, will always be an expensive line to work." For those who desire to know for themselves the principles which must for the future govern successful and economical management of the great trunk lines which connect the West with the seaboard, there is no document more worthy of careful examination than the annually much-looked-for report of Mr. Joy, President of the Michigan Central, one of the most valuable connections of Erie. Mr. Joy expresses his belief that, notwithstanding the tremendous reduction which has taken place in the rates of transportation in recent years—from 3-6-100 per ton per mile in 1865 to 1-90-100 in 1874—the present rates will never be either appreciably or permanently improved upon; and, in justification of the large and costly improvements which in recent years have, from funds provided by his stockholders, been made in the condition of the road, he tells them that it is no longer a possibility that an east and west trunk line with limited facilities can exist and expect to do a moderate business at profitable rates. Under the new condition of things such railroads can scarcely remain solvent, still less be financially successful, unless, by the perfection of the road and its maintenance in the highest state of efficiency, the maximum amount of business can be carried, and at the minimum expense for its conduct, and that the latter is absolutely impossible of attainment unless by the presence of the former. Is the Erie Railway, then, in this high state of efficiency? If so, how is it that

	In 1868-69.	In 1874-75.
Erie earned.....	\$16,700,000	\$17,970,000
Pennsylvania earned.....	17,250,000	22,642,000
Central earned.....	22,071,000	29,149,000

Sir Edward Watkin, and especially Captain Tyler, tells us that it is not; and to expect that Mr. Jewett can, under present conditions, work Erie at this rate, is, we fear, to court disappointment. Experience seems to point to the conclusion that the true economy would be by a speedy but careful expenditure to raise the condition of the road from "average" to "first-class." Then we would be willing to say—"Mr. Jewett, we have this year expended \$5,000,000 in laying a third rail, in steel rails, and in increase of equipment; in return for this we will expect you to give us at least \$700,000 or \$800,000 more net revenue," but till then we should be content with much smaller results than working at 65 per cent., for it seems to us that the bond and shareholders on this side, by a proper appreciation as well as a careful oversight of the doings of their President-Receiver, should endeavor to secure his confidence, as, by judicious and careful management, we trust he may secure theirs. So much for the means to be adopted to increase the earnings of the road. They are, in one word, raise the road without delay to the standard of its competitors. The all-important question still remains—How can the capital account of the company be so reorganized as to place it at once in a solvent position, and so enable its affairs to be administered by its proprietors instead of by courts of law. On this, the great question on the solution of which depends the future of the undertaking, our views are distinct and decided. In our opinion, the only honest, sound and safe way to get out of the difficulty, and to keep out of it, is resolutely to shut an accumulation of mortgage liabilities on the one hand, and on the other to give increased reality to the bonds and stocks of the company already existing as items in capital account. Members of the committee who have not been in America can have no idea of the feeling, half of shame, half of loathing, which Erie affairs produce in the minds of honest Americans. "Erie," said a prominent New York banker in the beginning of this year, when one of our number asked him if it were true that his firm was to become its financial agent, "Erie," said he, "is an unclean thing—you cannot touch it without being defiled. Rely on it, we'll have nothing to do with it." It is doubtless known to the committee that of the \$78,000,000 of common stock, \$47,061,622 is discount, or "water," as they call it there, while of the balance, who knows how much has gone to settle the gold losses of Fisk and Gould, or in the polluted expenditures made in the too successful attempt to corrupt the judiciary of a State? Nor are the bonds entirely free from the watery element. Long after that "peculiar" person, Jay Gould, was by "peculiar" methods ejected from his palatial office at the Grand Opera House, a second consolidated mortgage was issued, and—there is no use blinking the fact—great part of these bonds were sold after Mr. Jewett's accession to office, bearing 7 per cent. interest, at about 60 per cent. of their face value. Now when we say that any sound scheme of reorganization must give increased reality to the bonds and stock of the company as items in capital account, we simply mean that there must be an assessment on the stock, and a sweeping reduction in the interest on the bonds secured by the second mortgage. With respect to the first consolidated mortgage bonds, they stand on an entirely different footing from the other securities; they represent actual hard cash, or at least greenbacks received by the company or its representatives. Even if foreclosure is difficult, they have beyond question an absolutely good security for the ultimate payment of both principal and interest. The case is otherwise with the inferior securities. They are in danger of being legally extinguished, and therefore must themselves make the main effort for self-preservation. But if an honest and hearty effort is made by those endangered interests in the direction of "self-redemption," it is not too much to expect that the secured bondholders may be willing also to assist in perfecting a reorganization which will make their bonds, if not more secure, at least more reputable. We assume that a friendly foreclosure is now decided upon. In no other way can there be a summary riddance of those oppressive leases, legacies of Fisk and Gould's rascalities, the loss on which now swallows up so large a sum annually. Suppose, then, that under a friendly foreclosure the stockholders contributed \$8 or \$10 per share, a sum sufficient to pay off the floating debt and provide funds to greatly improve the condition of the line; and suppose that the first mortgagees, rather than have paper, were content with 6 per cent. prompt cash for five years, and the seconds were paid 4 per cent.,\* also in cash, what would be the result?

ANNUAL INTEREST CHARGE.	
\$13,400,000 currency, at 7 per cent.....	\$938,000
16,000,000 firsts, at 6 per cent. gold.....	996,000
24,400,000 seconds, at 4 per cent. gold.....	976,000
Premium on gold, at 12 per cent.....	236,000

\$3,146,000

At once a small surplus is shown for stockholders even on present earnings, without allowing anything for economy resulting from improvements, or a revival of business, or better management. An absolute transformation in the character of all the securities is at once effected, and that in the soundest of all possible methods. No interest would benefit to no great an extent as the stockholders themselves. If this—as it seems to us the honest way, and the only way to a re-

\*4 per cent. for 5 years, and 5 per cent. thereafter, would, including gain on redemption, give an annual return of between 7 and 8 per cent. on issue price.

turn to specie payments—is decided against, the other alternative (and it can only become a possible alternative if the patience of the bondholders is inexhaustible) is—further inflation. The debt being too large already, the proposal would be that the interest be paid by the creation of new debt. Excuse a sentence or two as to the morality of the proposal. When Turkey issues an edict that for five years it will pay half cash and half paper, it is denounced as a repudiator and a confederator; and when first mortgagees are told, "We admit your rights; your claims are unquestionable; but we can fight you in New Jersey, in New York, in Pennsylvania for two years, so you must either take all paper or get nothing"—really they are to be excused for thinking that Turkey is half honest compared with Erie shareholders. Such a step can only be justified on the plea that the instinct of self-preservation in extreme cases is paramount to all other considerations. But if there be any other way, and, as we have pointed out, there is, in our opinion, a much more excellent way, by which the rights of undoubted priorities may be amicably arranged, rest assured that the stockholders will in the end find that such a settlement will be far more to their advantage than a resort to Turkish expedients, which, in staying off the evil day, only makes it the more difficult to meet when it does come, as come it inevitably must. Suppose that a let-alone policy be adopted, and much-needed improvements are indefinitely postponed; suppose that in the hands of the courts two years' revenue is sufficient to pay off the floating debt, is it not clear as day that this \$4,000,000 of debt is replaced by \$7,000,000 of debt, for arrears of interest? With its credit gone, and with no other means of raising money but by forced loans from the bondholders, liability must be piled on liability, the stockholders shut out irrevocably, and the mortgages—save the mark!—converted into Grand Trunk preferences. Gentlemen, the future of the railway lies in your hands; each of you must share the responsibility of the course which is adopted. That your mature decisions may be wise we have strong hopes; but now, while these decisions are unformed, we ask you, with all the force which a sincere and intelligent conviction can give—not as bondholders alone, but as those who would see the foulest records in American railroad history inexorably closed—we ask you resolutely to determine that you will not lightly commit yourselves to a further inflation of the already fictitiously swollen capital account of the Erie Railway. One of your number who has some knowledge of American railways has publicly referred to the successful reorganization of several now prominent and flourishing Western roads. Fortunately it surely is for you that the man who originated and successfully carried out these reorganizations was Mr. Samuel J. Tilden, now Governor of the State of New York. Mr. Tilden it was who, disregarding his professional engagements, labored day and night till Tweed was consigned to the penitentiary in Blackwell's Island and who, elected to a position second in importance only to that of the President himself, now enjoys the unbounded confidence of his fellow-citizens. Gentlemen, if there be a lack of unanimity, if there be a doubt in the minds of any of you as to the proper settlement of this all-important matter, take Mr. Tilden's friendly advice. To the reorganizers of the Erie Railway Company the goodwill of the Governor of the State of New York is as invaluable as, we are sure, will be his experienced counsels. Whatever plan you may adopt, see that its success does not depend on the realization of brilliant estimates of the future, but is based on actual results, and when prosperity does come, and you are able by now putting your house in order to obtain your full share of it, the greater honor will be to you, who by the recommendation of a timely sacrifice—insignificant compared with its results—will have made Erie bonds first-class securities, and will have converted the common shares from being gambling counters, intrinsically valueless, into the representatives of a great property constantly increasing in value and burdened with only a moderate debt. The expression of these views has been prompted by the friendliest spirit to the London Committee, and in a like spirit we trust they may be received by them. We have not desired to attempt to anticipate the work of the Committee, but to indicate the principles of proposals which we would be prepared to recommend to our constituents. This we do without prejudice to them, and without compromising in any way our position for further action desired by them.

We are, gentlemen, your obedient servants,  
O. G. MILLER,  
A. H. MONCUR,  
ROBERT FLEMING.

## General Railroad News.

### TRAFFIC AND EARNINGS.

#### Lake Rates.

The Buffalo Commercial says: "For the first time since the opening of navigation this season, owners of vessels and boats are receiving something like a fair remuneration for their services. The prices that were paid down to the latter part of October were not sufficient, on the average, to defray the current expenses. How low the rates have been is shown by the following exhibit of average freights on wheat and corn from Chicago to Buffalo by lake, and the average on the same cereals from Buffalo to New York, by canal, during the month of October, in the ten years named:

Year.	—LAKE—		—CANAL—	
	Wheat. Cents.	Corn. Cents.	Wheat. Cents.	Corn. Cents.
1866.....	13.5	11.7	19.6	16.3
1867.....	9.0	7.0	19.1	16.3
1868.....	9.3	8.3	19.2	16.1
1869.....	10.3	9.8	21.7	19.0
1870.....	8.5	7.5	11.9	11.5
1871.....	10.1	9.7	15.9	14.1
1872.....	16.5	15.5	14.2	12.6
1873.....	7.8	6.8	12.7	11.3
1874.....	4.1	3.8	9.6	8.6
1875.....	3.7	3.4	8.2	7.4

"The average for last month, it will be seen, was lower than that for the same month in any preceding year. But low as is 3.7 cents on wheat from Chicago, that is an improvement as compared with the average for September which was only 2.4 cents. The rate by canal last month was a trifle more than one-half of that paid in October, 1871, and a little over a third of the average for the same month in 1869. This surely is cheap transportation with a vengeance.

"But thanks to the railways, there is a good prospect that at least fair prices will be paid the remainder of the season. The united action of the trunk railways in advancing their freight charges on the 1st of November has convinced Western shippers that they will have to pay round prices for every bushel shipped by rail hereafter. The result is that they are having their property forwarded by water as rapidly as possible. During the past two weeks the shipments from the Western ports have been heavy. Under the impulse of these liberal offerings freight rates have advanced nearly a hundred per cent. at Chicago and Milwaukee. On the 21st of October the current price on wheat at the former port was 3½ cents a bushel. Yesterday the market was reported steady at from 6 to 6½ cents.

"Heavy shipments and increased rates at the West have naturally caused a large advance in canal freights. The rise

here, however, is not as great in ratio as that at Chicago. On the 21st of October the prevailing rate on wheat by canal was 9 cents to New York. Yesterday 11 cents were freely paid. During the entire first half of the last month the rate ranged at and below 7½ cents a bushel, and the average for September was 7 cents. Although the recent advance is a large one, it must not be supposed that the present freight is an extravagant one for this time of the year. The average rate for October, 1873, was 12.7 cents, and that for the same month in 1872 was 14.2 cents, both of which rates are above the present charge. But even if vessel-men and canal-forwarders should run up their prices rather high now, when they have the chance, it would not be surprising, for there has been no money for them in the present season's business down to the first of November."

#### Railroad Earnings.

The following figures are from reports made to the Massachusetts Railroad Commission for the year ending Sept. 30, 1875:

	Earnings.	Expenses.	Net earn.	Earn. per mile.	P. c. of exp.
Cheshire.....	\$658,373	\$581,445	\$76,928	\$10,235	88.03
Grafton Center.....	5,906	5,287	619	1,969	88.88
Hanover Branch.....	34,413	22,621	11,792	4,302	65.00
Housatonic.....	682,010	469,411	212,599	5,413	68.82
New York & New Eng-land.....	915,880	766,620	149,260	5,515	83.70
Worcester & Shrewsbury.....	11,632	9,635	1,997	4,308	82.84

Other earnings have been reported as follows:

Year ending Sept. 30:		1874-5.	1873-4.	Inc. or Dec.	P. c.
Baltimore & Ohio.....	\$14,496,552	\$14,947,090	Dec.	\$450,538	3.5
Expenses.....	9,936,544	9,416,651	Inc.	519,893	5.5

Net earnings.....	\$4,560,008	\$5,530,439	Dec.	\$1,040,431	18.8
Earnings per mile.....	11,514	14,770	Dec.	3,256	22.0
Per cent. of expenses.....	68.74	62.99	Inc.	5.75	9.1

James River & Kanawha Canal.....	144,177	155,270	Dec.	11,093	7.1
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#### Ten months ending Oct. 31:

Atlantic & Pacific and	1875.	1874.		
leased lines.....	\$3,502,371	\$4,199,292	Dec.	\$696,921 16.6
Central Pacific.....	14,086,183	11,770,713	Inc.	2,315,470 19.7
Illinois Central.....	6,451,154	6,561,342	Dec.	100,188 1.5
Indianap., Bloom. & Western.....	1,038,195	1,392,411	Dec.	354,216 25.4
Kansas Pacific.....	2,711,349	2,763,349	Dec.	52,000 1.9
Keokuk & Des Moines..	686,535	871,905	Inc.	114,630 20.0
Missouri, Kansas & Texas.....	2,338,217	2,612,570	Dec.	274,353 10.5
Ohio & Mississippi.....	2,539,101	2,703,370	Dec.	163,269 6.0
St. Louis, Ait. & T. H., Belleville Line.....	458,159	459,604	Dec.	1,445 0.3
St. Louis, Iron Mt. & So. St. Louis, Kan. City & Northern.....	2,673,424	2,667,024	Inc.	316,400 12.4
St. Louis, Kan. City & Northern.....	2,139,966	2,089,884	Inc.	50,082 2.3

#### Four months, July 1—Oct. 31:

Ohio & Mississippi.....	\$1,083,196	\$1,208,032	Dec.	\$124,836	10.3
Expenses.....	794,682	817,366	Dec.	22,684	2.8

Net earnings.....	\$288,514	\$390,666	Dec.	\$102,152	26.1
Per cent. of expenses.....	73.34	67.66	Inc.	5.68	8.4

#### Nine months ending September 30:

Atchison, Topeka & Santa Fe.....	\$988,895	\$988,548	Inc.	\$90,347	10.1
Expenses.....	443,594	400,324	Inc.	43,270	9.8

Net earnings.....	\$545,301	\$408,224	Inc.	\$147,077	36.4
Per cent. of expenses.....	44.86	44.55	Inc.	0.31	0.7

#### Month of September:

Atchison, Topeka & Santa Fe.....	\$147,552	\$110,563	Inc.	\$36,989	39.4
Expenses.....	58,696	50,249	Inc.	8,447	16.8

Net earnings.....	\$88,856	\$60,314	Inc.	\$28,542	47.3
Per cent. of expenses.....	39.78	45.45	Inc.	5.67	12.5

Houston & Texas Central.....	293,761	254,533	Inc.	39,228	15.4
Expenses.....	135,052	142,996	Dec.	7,943	5.1

Net earnings.....	\$158,709	\$111,538	Inc.	\$46,871	41.8
Per cent. of expenses.....	46.18	56.18	Dec.	10.00	17.8

Mobile & Ohio.....	149,821	155,202	Dec.	5,381	3.5
Expenses.....	191,805	198,527	Inc.	34,278	21.1

Deficit.....	\$41,994	\$3,325	Inc.	\$38,669	...
Per cent. of expenses.....	128.02	102.27	Inc.	25.75	25.3

#### Month of October:

Atlantic & Pacific and leased lines.....	\$488,928	\$542,886	Dec.	\$54,558	10.0
Central Pacific.....	1,606,010	1,465,513	Inc.	140,497	9.6

Chesapeake & Canal.....	60,566	63,106	Dec.	2,540	4.0
Illinois Central.....	841,432	838,307	Inc.	3,125	0.4

Indianap., Bloom. & Western.....	132,465	146,958	Dec.	15,493	10.5
Kansas Pacific.....	355,126	358,166	Dec.	3,040	0.9

Keokuk & Des Moines.....	74,223	71,116	Inc.	3,107	4.4
Missouri, Kan. & Texas St. Louis, Ait. & T. H., Belleville Line.....	313,374	313,593	Dec.	189	0.1

St. Louis, Iron Mt. & Southern.....	56,467	65,800	Dec.	9,333	14.2
St. Louis, Kansas City & Northern.....	384,730	357,820	Inc.	26,910	7.5

St. Louis, Iron Mt. & Southern.....	263,240	278,106	Dec.	14,866	5.3
Southern Pacific.....	184,600	...	...	...	...

Southern Pacific earnings are in gold. By an error in transcribing last week, the earnings of the St. Louis, Iron Mountain & Southern for October were given as \$344,730 instead of \$384,730, as they should have been.

#### Two weeks ending Oct. 29:

Great Western.....	\$38,531	\$43,512	Dec.	\$4,981	11.5
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#### Two weeks ending Oct. 30:

Grand Trunk.....	\$95,700	\$96,100	Dec.	\$400	0.4
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#### Flour and Grain Movement.

Receipts and shipments for the week ending Nov. 6 are reported as follows (flour in barrels and grain in bushels):

San Francisco wheat exports for October included 22 cargoes of wheat and one of flour to Great Britain, parts of three cargoes of flour for Central America and the Philippine Islands and some consignments of flour to China. The figures for the

the 11th month and for the four months of the California crop year ending

Corn:					
Lake ports' receipts.....	729,871	674,891	Inc.	54,980	8.1
" " shipments.....	766,616	1,196,530	Inc.	429,914	55.5
Atlantic ports' receipts.....	455,613	502,492	Dec.	46,879	9.3

Grain of all kinds:					
Lake ports' receipts.....	4,259,118	2,878,641	Inc.	1,080,477	65.1
" " shipments.....	4,639,686	2,412,374	Inc.	2,227,312	92.4
Atlantic ports' receipts.....	3,124,610	2,056,461	Inc.	1,068,149	83.0

Of the lake ports' shipments, 25 per cent. went eastward by rail this year, 12½ per cent. in 1874 and 21 per cent. in 1873. San Francisco wheat exports for October included 23 full cargoes of wheat and one of flour to Great Britain, parts of three cargoes of flour for Central America and the Philippine Islands and some consignments of flour to China. The figures for the month and for the four months of the California crop year end-



ing Oct. 31 are as follows, flour being reduced to wheat in the totals:

Month of October:	1875.	1874.	Inc. or Dec.	P. c.
Flour, barrels.....	42,300	35,224	Inc.. 7,076	21.0
Wheat, bushels.....	1,395,500	1,368,000	Inc.. 27,500	2.0
Total, bushels.....	1,585,850	1,526,508	Inc.. 59,342	3.9
Four months ending Oct. 31:				
Flour, barrels.....	137,200	118,024	Inc.. 19,176	16.3
Wheat, bushels.....	4,744,000	4,468,234	Inc.. 275,766	6.2
Total, bushels.....	5,361,400	4,999,342	Inc.. 362,058	7.2

The value of this year's exports is much greater than last year's, the average price of wheat in October being \$2.05 per bushel (\$1.23 per bushel) against \$1.52 per bushel (\$0.91 per bushel) in October, 1874.

#### Coal Movement.

The coal tonnage of the Chesapeake & Ohio Canal for October was: 1875, 112,094; 1874, 103,515; increase, 8,579 tons, or 8.3 per cent.

For the nine months ending Sept. 30 the coal production of Nova Scotia and the disposition made of it is reported to the Government as follows:

	1875.	1874.	Inc. or Dec.	P. c.
Sent to points in Nova Scotia.....	149,319	149,649	Dec.. 330	0.2
Other Canadian Provinces.....	296,844	272,819	Inc.. 24,025	8.8
United States.....	64,981	123,965	Dec.. 58,984	47.6
Other countries.....	10,219	25,456	Dec.. 15,237	59.8
Totals.....	521,363	571,889	Dec.. 50,526	9.9

The coal tonnage of the Pennsylvania Railroad for the last 10 days of October was: Coal, 121,586; coke, 23,120; total, 144,706 tons.

The James River & Kanawha Canal carried during the year ending Sept. 30, 1875, 15,649 tons of coal, a decrease of 4,645 tons, or 23.9 per cent., from the preceding year.

Other coal tonnages are reported as follows for the week ending Nov. 6:

	1875.	1874.	Inc. or Dec.	P. c.
Anthracite.....	460,402	450,347	Inc.. 10,115	2.2
Semi-bituminous, Broad Top and Clearfield.....	24,876	.....	.....	.....
Cumberland.....	39,604	.....	.....	.....
Bituminous, Barclay.....	7,707	.....	.....	.....
Western Pa.....	36,581	.....	.....	.....
West Va.....	4,882	.....	.....	.....

The anthracite shipments show a considerable decrease from those of the past few weeks.

#### Freight Rates.

At a meeting held in Chicago, Nov. 13, the following rates per 100 pounds were agreed upon from Chicago and St. Louis to Missouri River points:

	1st class.	2d class.	3d class.	4th class.	Special.
From Chicago.....	90 cents.	70 cents.	50 cents.	40 cents.	35 cents.
From St. Louis.....	68 " 49 "	49 " 31 "	29 " 29 "	20 "	20 "
From Quincy or Hannibal.....	68 " 49 "	49 " 31 "	29 " 29 "	20 "	20 "

The following new schedule of rates per 100 pounds from New York westward has been adopted by the trunk lines and went in force Nov. 15:

	1st class.	2d class.	3d class.	4th class.	Special.
New York to	cts.	cts.	cts.	cts.	cts.
Pittsburgh, Pa.....	45	40	35	30	20
Cleveland, O.....	49	46	39	30	23
Columbus, O.....	60	56	48	36	28
Cincinnati, O.....	70	64	52	37	31
Fort Wayne, Ind.....	65	61	52	39	30
Indianapolis, Ind.....	71	66	57	43	33
Logansport, Ind.....	71	66	56	42	33
Grand Rapids, Mich.....	75	70	60	45	35
Chicago, Ill.....	75	70	60	45	35
Milwaukee, Wis.....	75	70	60	45	35
Louisville, Ky.....	86	81	71	55	44
St. Louis, Mo.....	97	91	79	61	49
Nashville, Tenn.....	103	95	82	63	50
Memphis, Tenn.....	120	110	95	72	57

These rates are made on the basis of 45 cents per 100 pounds for fourth-class from New York to Chicago, which is 0.987 cent per ton per mile.

#### THE SCRAP HEAP.

##### Railroad Manufactures.

The Warren Manufacturing Company at Springfield, Mass., is building 20 box cars for the Connecticut Western, and 12 passenger cars for the New York, New Haven & Hartford. Twenty-five coal cars have just been shipped to the Rhinebeck & Connecticut road.

The Hinkley Locomotive Works in Boston recently turned out an engine for the Boston, Clinton & Fitchburg road, and one for the contractors on the Troy & Greenfield road.

The Baldwin Locomotive Works in Philadelphia have, it is stated, secured a large South American contract.

The Rogers Locomotive Works at Paterson have sold some engines to the Montclair & Greenwood Lake Company.

The threatened strike of the Pittsburgh puddlers has been prevented by the masters agreeing to pay \$5 per ton for puddling for the next thirty days, and thereafter the price is to be regulated in accordance with prices paid in the East.

The Brooks Locomotive Works at Dunkirk, N. Y., recently sold to the Illinois Central Railroad Company two engines with 17 by 24, and three with 16 by 24 cylinders. They are now building a narrow-gauge engine for the Cincinnati & Westwood Railroad.

#### OLD AND NEW ROADS.

##### New Jersey Midland.

A new plan of reorganization, submitted to the first-mortgage bondholders in a circular signed Francis Leland, George W. Powers, Remington Vernam and eleven others, reads as follows:

"First, After the foreclosure and purchase of the road by the first-mortgage bondholders, the board of directors of the new company, each of whom shall be the owner of at least \$10,000 of the first-mortgage bonds, shall be authorized to make a first-mortgage debt not to exceed \$350,000, to be used only in paying the Receiver's certificates authorized by the Chancellor of New Jersey, if such certificates shall be issued, to put and keep the road in order, pay for rights of way and necessary rolling stock, but no further amount of said \$350,000 shall be issued than shall be sufficient to pay said certificates actually issued, or the necessary expenditures for which they were authorized.

"Under this plan it is not proposed to make any mortgage ahead of the new mortgage to be issued to the holders of the present first-mortgage bonds, and the above provision is only to provide for possible contingencies, which we are confident will not arise.

"In case of the issue of said bonds the board shall communicate to the stockholders the details for which the money is needed, and afterwards an exact account of its expenditure, and none of the bonds shall be hypothecated for any purpose whatever, and none shall be sold for less than 95 per cent.

"Second, There shall be issued to the holders of the present first-mortgage bonds new bonds for the amount of their bonds, and accrued interest to the date of reorganization, having thirty years to run, bearing 7 per cent. interest, payable semi-annually, principal and interest payable in gold; the interest if earned; if earned in part and not in full, it shall be paid in cash so far

as earned, and the balance in a scrip, entitled to redemption, with cumulative dividends of 7 per cent. before any dividend shall be paid on stock.

"Third, Issue, to the holders of the present first-mortgage bonds, stock, dollar for dollar, to the amount of their bonds, which stock is to be attached to and not to be separated from said bonds, and which stock shall control the company, and after providing for the interest on the prior incumbrances hereinafter mentioned, shall be entitled to dividends when earned.

"When this plan shall have received the approval of the holders of \$1,000,000 of the first-mortgage bonds a meeting shall be held of the subscribers to this plan, who shall elect, by a majority-bond vote, a committee, not to exceed fifteen in number, to carry out the above plan, and the results contemplated shall be arrived at by any method or arrangement which is legal and which counsel may advise."

Bondholders approving this plan are asked to signify their approval to Alex. Main, No. 152 Broadway, New York City.

##### Atlanta & Richmond Air Line.

A meeting of the first-mortgage bondholders was held in New York, Nov. 18, when the committee reported that they had been over the road, and believed that it was fully worth the amount of the bonds and interest. It was voted to increase the assessment to \$8 per bond, in order to pay off a judgment and to carry on the foreclosure suit. A report that the Pennsylvania Railroad Company had offered to run the road and pay all the net earnings to the bondholders was denied; the only proposition ever made by that company contemplated the funding of the coupons up to 1885.

##### Union Pacific.

The trustees of the Omaha Bridge mortgage have drawn by lot 51 bonds for redemption according to the terms of the mortgage. These bonds will be paid April 1, 1876, at the London & San Francisco Bank, London, or the office of Drexel, Morgan & Co., New York. The numbers of the bonds drawn are: 33, 46, 73, 109, 185, 217, 448, 591, 599, 622, 703, 736, 752, 822, 970, 1016, 1055, 1060, 1088, 1168, 1281, 1288, 1308, 1326, 1431, 1470, 1537, 1629, 1662, 1795, 1816, 1863, 1872, 1884, 1903, 1922, 1950, 1959, 2010, 2027, 2053, 2060, 2063, 2137, 2168, 2255, 2274, 2348, 2374, 2397, 2428.

##### Franklin Telegraph.

A special meeting of the stockholders was held in Boston, Nov. 16. The Auditor reported that the earnings of the line from April 30, 1871, to Sept 1, 1875, were \$1,135,516; expenses, \$1,026,953. He stated that the yearly earnings were now \$300,000, and the expenses need not exceed 80 per cent.

The petition for the dissolution of the company was before the Massachusetts Supreme Court on a demurrer Nov. 16. The petitioners claim that a dissolution and sale of the property is necessary to protect their interests.

##### Rutland.

The suits against the Central Vermont came up in the Chancery Court at St. Albans, Vt., Nov. 16. There are two of these suits, one an original bill for an abrogation of the lease and an injunction to restrain the Central Vermont from preventing the Rutland Company from taking possession; the other, a petition in the original suit, under which the Central Vermont is trustee, praying that the trustee may be ordered to pay the rental due or give up possession of the property. The Court decided that both suits could not proceed together, and ordered that the plaintiff choose which should go on. Counsel for the Rutland Company decided to proceed under the petition in the old suit, and the bill was dismissed without prejudice.

##### European & North American.

A new survey has just been completed for the proposed extension of the Bangor & Piscataquis Division from Abbot, Me., through Monson, Blanchard and Shirley into Greenville.

##### Manchester & Keene.

In the Circuit Court at Keene, N. H., a case has been agreed upon by both parties and sent up to the Superior Court for a decision, as follows: Has a town or city the right, under the constitution and laws of New Hampshire, to vote a gratuity to a railroad corporation by a popular vote or municipal authority? The question arose in a case where the city of Keene has voted to give a gratuity of about \$130,000 to the Manchester & Keene Railroad. A decision is expected at the December law term.

##### Ogdensburg & Lake Champlain.

In the suit brought to decide whether the lease to the Vermont Central trustees was legal and valid, the New York Supreme Court dismissed the case on demurrer on the ground that some of the parties were out of its jurisdiction and that there was no sufficient cause of action. An appeal was taken and the Court of Appeals has just denied a motion to dismiss the case.

##### Baltimore & Drum Point.

A contract for the whole road has been let to Henry S. Wells of New York, who agrees to complete the road, provided the counties of Anne Arundel and Calvert will make the subscriptions heretofore authorized, and the city of Baltimore will endorse \$500,000 bonds of the company. The terms proposed to the city are that \$200,000 shall be issued when the road is completed to Annapolis, \$100,000 when it reaches Mount Zion in Anne Arundel County, and the balance when it is completed to Drum Point. The City Council has not yet acted on the proposal.

##### Southwestern & Rio Grande.

Messrs Weiss, Britton & Co., of Slatetale, Pa., have offered to take the contract, provided they have entire control of the work and a reasonable price can be agreed upon. They will take pay 50 per cent. in cash, 10 per cent. in stock and 40 per cent. in bonds. The road is surveyed from Shreveport, La., to the Sabine River. Seven miles are completely and three partly graded.

##### Meetings.

The annual meeting of the Old Colony Railroad Company will be held at the passenger station in Boston, Nov. 23, at 11 a. m.

##### Panama.

On application of Aaron Freeman, a stockholder, the New York Supreme Court has granted a preliminary injunction and an order to the company to appear Nov. 19 and show cause why a permanent injunction should not be granted to restrain it from establishing a line or lines of steamships between New York and San Francisco. The complaint alleges that the company has no authority from its charter to establish any such line, its only power being to use vessels for lighterage and harbor purposes.

##### James River & Kanawha Canal.

At the annual meeting in Richmond, Va., last week, the stockholders resolved that the true policy of the company is to extend the canal from Buchanan to the Chesapeake & Ohio Railroad at Clifton Forge; that the Legislature of Virginia be petitioned to give the convict labor of the State for that purpose; that an issue of construction mortgage bonds be authorized to provide for such extension, the bonds to be substituted for the second-mortgage bonds heretofore issued; that the board be instructed to petition for the repeal of all laws looking to a cession of the canal to the United States; that a committee be appointed to inspect the condition of the canal and the

company, and report to a meeting of the stockholders to be held Feb 9, 1876, and that the report of the President be printed and distributed to stockholders.

##### Chesapeake & Ohio Canal.

At the regular monthly meeting of the board last week the President reported earnings for October \$60,566.12; current expenses and repairs, \$21,300.52; net earnings, \$39,265.60. The cash balance on hand at the end of the month was \$108,000.71. The board appropriated \$50,985 to pay the overdue coupons on the preferred construction bonds next in order due July 1, 1863, which will be paid at the banking house of Alexander Brown & Sons, Baltimore, on and after Nov. 17.

##### Montgomery & Eufaula.

Under a decree of the United States Circuit Court Robert W. Healey and John P. Southworth will sell at public auction in Mobile, Ala., Dec. 6, this road, with the franchises, equipment and all other property of the company. The property cannot be sold for less than \$400,000 and the sale will be made subject to the first mortgage for \$1,280,000, with the interest due and unpaid thereon. The road is 80 miles long, from Montgomery, Ala., to Eufaula.

##### Des Moines & Fort Dodge.

A meeting of the land-grant bondholders who bought the northern end of the old Des Moines Valley road at foreclosure sale, and organized under this name, was held in New York, Nov. 15. Out of 2,278 bonds, 2,099 were represented at the meeting. Mr. Whitehead, President of the company, stated that the business of the road was increasing but slowly, and that the road itself was in poor condition. The plan of reorganization provided that new bonds should be issued for the old, and that interest on one-half of these should begin July 1, 1876. The payment could be made, but to do it the road must be neglected. To put it in good repair would require \$60,000 next year, and \$30,000 per year afterward. The bondholders resolved to fund their coupons for a year and appropriate the money required for repairs. They also resolved to ratify an agreement which settles the questions heretofore in dispute with the Keokuk & Des Moines Company. By this agreement the latter company receives the title to the bridge over the Des Moines River, two locomotives and the use of the depot in Des Moines for five years at \$1,000 per year, and pays in return \$20,000 in bonds and \$15,000 in cash. It was also voted to extend to Dec. 31 the time for exchanging the old bonds for those of the new company.

##### Pacific of Missouri.

The holders of \$850,000 third-mortgage bonds have begun a suit to foreclose the mortgage in the United States Circuit Court.

Notice has also been served of an application for the appointment of a receiver for this road independent of the Atlantic & Pacific.

##### Atlantic & Pacific.

The receivers give notice that the past due coupons on the first-mortgage bonds and the real-estate bonds of the Missouri Pacific and on the South Pacific first-mortgage bonds will be paid on presentation at the National Bank of Commerce in New York.

The Court has authorized the receivers to pay back pay-rolls amounting to about \$76,000 and outstanding bills for supplies amounting to some \$25,000.

##### Erie.

The work of filling in the trestle bridge at Cascade Ravine, near Susquehanna, is about completed, two trains and a steam shovel having been employed for two months past. The bridge was built over the ravine last August, a large part of the fill there having been then washed out by a freshet. The fill has, it is believed, been made secure against another freshet by the provision of sufficient culvert ways for any water that is likely to come down, and by retaining walls to prevent washing at the base.

##### Auction Sales of Railroad Securities.

In New York, Nov. 10, the following prices were obtained at auction: American Dock & Improvement Company bonds, guaranteed by Central of New Jersey, 99%; Third Avenue Railroad 7 per cent. bonds, 98%; Third Avenue stock, 132%; Sixth Avenue stock and scrip, 125; Morris Canal preferred stock, 127; 7 per cent. scrip due 1889, 95; Louisville & Nashville, second-mortgage bonds, 80 and 81; International of Texas, first-mortgage gold bonds, 55; Lehigh Valley stock, 124.

In New York, Nov. 17, Montgomery & Eufaula first-mortgage bonds brought 80; Southern Minnesota bond certificates, 60%; Connecticut Western first-mortgage bonds, 80%; Warren Railroad Stock, 100; Canada Southern first-mortgage bonds, 53; Chicago & Canada Southern first-mortgage bonds, 38.

##### Delaware & Bound Brook.

There has been some trouble with the Pennsylvania Railroad as to the proposed grade crossing of the Mercer & Somerset road at Hopewell, N. J. The men employed on the road began work the other day to put in the crossing frogs with a view to beginning to lay track there, but the Pennsylvania people prevented them from proceeding and placed an engine on guard at the crossing.

The arguments on the injunction to stop the construction of the bridge over the Delaware at Yardleyville were begun before the Chancellor of New Jersey Nov. 13. The Attorney General argued that the bridge obstructed navigation; that its building could only be authorized by concurrent legislation by New Jersey and Pennsylvania, and that the general railroad law did not authorize the construction of any bridge over the Delaware. The case was continued to Nov. 17.

It is charged that the evident object of the proceeding is to embarrass or prevent the completion of the road; that the bridge can be no obstruction to navigation as there is only water enough for light craft at that point and the bridge is both higher and has longer spans than the Yardleyville highway bridge near by and the Trenton bridge lower down. Moreover, it is said that at that point the channel is on the Pennsylvania side of the river, where an injunction from a New Jersey court would, of course, not apply. The work is progressing on the bridge, the Chancellor having refused to grant any preliminary injunction.

##### Lafayette, Muncie & Bloomington.

The track is now laid to Frankfort, Ind., 25 miles west of Tipton, the last point noted, and 60 miles from the eastern terminus at Muncie. The work has been somewhat delayed by the failure of the rails to arrive promptly.

The Indianapolis, Cincinnati & Lafayette Company has begun suit to restrain this company from trespassing upon its right of way. The new road runs alongside of the Indianapolis road for several miles from Lafayette, Ind., and the latter claims that its road is being injured by the grading for the new line; also that it is not being built according to the original contract.

##### Pittsburgh, Washington & Baltimore.

The Baltimore Gazette says: "President Garrett, at the recent meeting of the board of directors of the Baltimore & Ohio, stated that almost the entire amount of second-mortgage bonds of this road are now in possession of the Baltimore & Ohio. These bonds amount to \$5,000,000. In addition to this they bring the road in debt to the Baltimore & Ohio for operating expenses, etc., \$5,000,000, making the total claim of the latter \$10,000,000. President Garrett now proposes to retire the entire second mortgage, and it is understood is now negotiating a



loan of \$2,300,000 in London and issuing for its security new second-mortgage bonds on the Pittsburgh & Connellsville road, or branch, as it will probably be designated in future. The secrecy observed regarding the proceedings of the recent meeting of the board of directors of the Baltimore & Ohio was to enable the latter corporation to obtain the remaining outstanding second-mortgage bonds at the recent low rate at which they were quoted in the market. It is well-known that as soon as the action of the board was made public those holding the second-mortgage bonds outside of the company would at once advance their price to an exorbitant figure. It is understood that yesterday the agents of the Baltimore & Ohio had secured the remaining second-mortgage bonds.

#### New York & Oswego Midland.

The Utica Committee have issued a new circular urging bondholders to withdraw from the consolidated Opdyke-Cowdrey Committee. They charge that that committee has abandoned the claim of the first-mortgage bondholders to a lien on the Western Extension and that they have allowed the leased branches to Utica and Rome to pass out of the possession of the Midland without a protest or an effort to prevent it. They say those branches are the most valuable part of the property and that their loss will certainly be a very great injury to it. They urge bondholders to withdraw their bonds from the Cowdrey Committee and to deposit them with A. D. Mather & Co., of Utica, who represent the Utica Committee.

The Utica (N. Y.) Herald says: "The circular says that the Court (Judge Blatchford) has decided that the receivers can not surrender the leased branches, running from Utica to Smith's Valley and Clinton to Rome. This is the first information to that effect the public has received. On the other hand, the officers of these leased lines claim that the recent transfer to the Delaware, Lackawanna & Western Railroad and the Delaware & Hudson Canal Company, was made with the knowledge of the Court and with its at least tacit consent. However that may be, it is to be presumed that these great coal and transportation companies would not have been party to the arrangement, if they were not sure of a permanent possession, beyond the power of the courts to intrude upon. There is much color for the statement that this arrangement, if perfected and continued, is a death blow to whatever future the Midland road may otherwise have had, as an independent organization. The building of a mile and a half of road at Earlville will connect the Utica, Clinton & Binghamton road with the through line of the Lackawanna, and all of the freight of the branches, by such a connection, would be diverted from the Midland, and seek New York by the other road. Thus, at one blow, would be destroyed a large portion of the business upon which the future prosperity of the Midland depends. It can readily be seen, therefore, that the key to the whole situation is in the hands of those who control the Utica and Rome branches. If they remain as they now are, it would seem, by business logic, that the Lackawanna and the Hudson Canal companies must ultimately control the main line of the Midland, the only alternative being its abandonment and ruin."

#### Massachusetts Central.

The Springfield (Mass.) Republican says: "Edward Crane's tour along the line of the Massachusetts Central Railroad, in behalf of his Bay State Transportation League, and of the further loan of the State credit for an indefinite amount, somewhere between twenty and a hundred millions, comes a little late. The Massachusetts Central people are disposed to clutch at it as the saving straw, but it is only a straw, and nobody has got hold of the other end. The representatives of the communities interested and the manufacturers of public sentiment generally along the line had better not build too much upon Mr. Crane's project. The State won't hear to it. The tunnel expenditure has made itself a live issue, and the only live issue, in the canvass just closed, though both parties and their candidates for Governor cowardly dodged it. Lee & New Haven and its chief backer have disappeared under a distressing pecuniary scandal, the most charitable view of which necessitates the conclusion that money and wassail have been the chief arguments to which this persistent beggar owes its long career; and finally Boston has wearied of Crane, and ceased to believe that pots of gold underlie the buttresses of his rainbows. Boston even grows critical of the tunnel and more skeptical of its future, more appreciative of the western connections which she has, more tolerant of railroads which charge enough to pay dividends and coupons, and less boastful of other railroads which carry freight east to reach Chicago, and whose stock is down to 20."

"It is not, therefore, a good year to attempt to saddle any new schemes on the credit of the State. It is doubtless within the power of those who accept Mr. Crane's suggestion to rally quite a party to the scheme, out of the disappointed towns which have put their money into that enterprise, fill the State House with a diligent lobby and bring the pressure to bear on a good many scattering votes here and there, some of them probably already seen to before election. They can waste a great deal of time of the session to the neglect of crying evils in our State affairs, but we do not believe they can carry any such scheme. The attention of the State is roused sharply to these matters, and the people are in no temper to be trifled with."

#### A New Mexican Scheme.

A company has been organized in Davenport, Ia., with a capital stock of \$2,000,000 for the purpose of building railroads in Mexico. Mr. John E. Henry is President, and the name of the corporation is the American Contracting Company. The new company has concluded contracts with parties now in Davenport, who represent themselves to be agents of parties holding concessions from the Mexican Government. These contracts are: First, a construction contract for the building of 50 miles of railway within the valley of Puebla, from the city of Puebla southward to the city of Matamoros. In the second contract this company becomes the three-fifths owner in 250,000 acres of choice coal lands, on which there is now open valuable mines of bituminous and anthracite coal, and the three-fifths owner in a concession from the Government to build 200 miles of railway from the city of Mexico southward and east to the said coal mines, which join the first-named line at Matamoros. In this contract the company pays \$1,200,000 purchase money for their interest, the concession carrying with it an actual cash basis subsidy of \$3,000,000.

#### Jersey City & Albany.

The trains on this road ceased running Nov. 1, and will probably not be put on again until spring, if then, the present management not having been any more successful than the former one in securing business for the road. The road is 12 miles long, from the New Jersey Midland near Ridgefield Park, N. J., northward to Tappanville. It is said that the New Jersey Midland offered to work it, but that the offer was declined.

#### Chicago, Rock Island & Pacific.

The work on the extension of the Sigourney Branch to Oak-look, Ia., is progressing steadily, although the contractors have been much delayed by wet weather, high water, strikes among their men, and the epizootic among the horses. It is intended to have the extension completed by Jan. 1.

#### Freight Rates Southward.

The Indianapolis Journal of Oct. 11 says: "A joint meeting of the managers of the pooled lines from Chicago to Cincinnati and the Green Line was held yesterday at the Union Depot. The following general freight agents were present: William Stewart, of the Pennsylvania Company; T. H. Kingsbury, of the Panhandle Line; A. H. McLeod, Cincinnati, Hamilton &

Dayton; H. J. Paige, Indianapolis, Cincinnati & Lafayette; Robert Geiger, of the Jeffersonville, Madison & Indianapolis; H. B. Smith, of the Indianapolis, Peru & Chicago, and L. D. Richardson, of Chicago, General Manager of the pooled lines. The meeting was called to take action in conjunction with the Southern combination of railways to advance rates on south-bound freights. After considerable discussion, it was decided unwise to take such steps at present, and the matter was postponed until the next monthly meeting. No other business of importance to the public was transacted."

#### Iowa Eastern.

The track of this road is now laid to Elkader, Ia., 3 1/2 miles beyond the late terminus, and trains began running to Elkader Nov. 15. About 1 1/2 miles of this extension are laid with iron rails, the remaining two with rails of hard maple mortised into the ties. The road is of 3-foot gauge.

#### New Jersey & New York.

There are rumors of a strike of the employees, whose wages have not been paid for several months, and who are very much dissatisfied in consequence.

#### Illinois Central.

The Land Department reports for October sales of 1,358.22 acres of land for \$10,373.41; cash collections on land contracts, \$18,088.40.

The Traffic Department reports earnings for October as follows:

	1875.	1874.	Inc. or Dec.	P. c.
In Illinois, 707 miles....	\$641,046.19	\$630,090.24	Inc.	\$10,976.95 1.7
In Iowa, 402 miles....	200,386.25	208,237.31	Dec.	7,851.06 3.8

Total, 1,109 miles...\$841,432.44 \$838,326.55 Inc. \$3,125.89 0.4

The average earnings per mile were \$907 in Illinois, \$498 in Iowa, and \$759 for the whole line. The traffic of the entire line thus far in 1875 has been as follows:

Corrected to Sept. 1.....\$4,871,888.14

Estimated for September and October.....1,579,256.04

Total (\$5,817 per mile).....\$6,451,154.18

#### Montclair & Greenwood Lake.

The new company has issued a call for a 4% per cent. assessment (\$45 per \$1,000 bond) on the bondholders who joined in the purchase of the road. The agreement of reorganization provided for the payment of an assessment of 12% per cent. by bondholders who deposited their bonds with the trustees. Those paying this assessment are to receive certificates which can hereafter be exchanged for the new issue of first-mortgage construction bonds. The Treasurer's circular calling for the money says: "This assessment must be promptly paid, as any delay in the matter will not only embarrass the managers of the road, but will undoubtedly result in very serious injury to the bondholders."

#### Buffalo, Bradford & Pittsburgh.

A correspondent writes as follows: "Engineers have just completed a survey for a railroad running from Gillesville, McKean County, Pa., south 20 miles to Wilcox, Elk County. They report a very favorable line, which, with the road now in operation from Carrollton on the Erie to Gillesville, forms a continuous line connecting the Erie with the Philadelphia & Erie road and runs through the Bradford oil district, also the extensive and valuable coal, oil and timber regions of McKean and Elk counties. This with the connecting roads north would form a part of a short direct line from Pittsburgh to Buffalo, Rochester and the Genesee country, and is deemed a line very important to the business interests of Pittsburgh, as well as all Western New York and the region through which it runs. Its early completion is expected."

#### Old Colony.

The bridge at Fall River is completed and was tested in the usual manner, by a heavy train on the upper railroad floor and a number of teams loaded with pig iron on the lower or highway floor. The tests were satisfactory, and the bridge will soon be in use. A connection is to be made with the Fall River, Warren & Providence road at once. It was built by the American Bridge Company, of Chicago.

Concerning this bridge and the last named road, the annual report of the Old Colony Company says:

"The new bridge at Fall River and the connection with the Fall River & Providence Railroad have been nearly completed. It is expected that they may be opened for business before Dec. 1."

The cost of the bridge has been, to date, about \$242,000, of which one-quarter is to be refunded from the county of Bristol. Its completion will probably cost about \$30,000. Arrangements had been made for the transfer to this company of the Fall River & Providence Railroad on Oct. 1, and means had been provided for the payment therefor. This accounts for the large amount of money shown by the Treasurer's accounts to be on hand at the time of closing the books. The transfer of the property has been delayed, but will probably be made before Dec. 1."

#### Northern Central.

The Baltimore Gazette says: "The piles for this company's new elevator at Canton have been driven and ballasted, and a large force of workmen are now employed sawing them off six feet below the surface of the water, and preparing them for the foundation, which is to be of Port Deposit granite, rising six feet above the water. The building will be 180 feet deep and 90 feet wide."

"The outer or western wall of the elevator will stand on the Port Warden's line, a distance of 400 feet from the shore, with 24 feet of water under the shutes. One hundred feet in shore is being excavated and guarded with sheet piles, making the entire dock 500 feet long, with a uniform depth of 24 feet of water up to the dock head. Freight sheds will be built on each side of the in-shore end of the pier, a distance of 320 feet, between which the railway tracks will run, loading and discharging freight to and from the cars and ships, as may be desired. Four dredging machines are engaged every day in deepening the water about the foundation and pier-head on both sides of the elevator and up to the head of the dock. The mud taken up by the dredgers is hauled in shore in dump cars by a locomotive, and used for filling in and grading the land along the line of the improvements now in progress. The elevator was to have been finished and in operation by May 1, 1876, but Chief Engineer Brown, who is carrying on the work, states that it will be at least thirty days later before the elevator can be prepared for the reception of grain. This elevator, unlike any other heretofore constructed in this section, will have the engine and machinery placed at the top of the building, after the fashion of the Point Breeze elevator in Philadelphia. One hundred workmen are employed on and about the pier and elevator improvements."

#### Philadelphia & Reading.

A Philadelphia dispatch says that the Joint Committee appointed by the Pennsylvania Legislature to investigate the affairs of the Philadelphia & Reading Railroad Company and the Philadelphia & Reading Coal & Iron Company, held a final meeting Nov. 11 and agreed upon the character of a report to be submitted to the Legislature. There was a general unanimity of opinion among the committee. It is understood that the committee holds that the constitutionality of the act incorporating the Philadelphia & Reading Coal & Iron Company is only for the decision of the courts, and not for the committee of the Legislature; and they recommend that the evidence taken in the case be submitted to the Attorney-General for his

examination. The committee condemns the policy by which such charters have been granted by the Legislature, but think that, as all other companies carrying anthracite coal had these great powers granted to them there was no good reason why they should be withheld from the Reading; and they express the hope that a different and more prudent course will be pursued hereafter in this matter. Concerning the charge of conspiracy to regulate the price of coal, the committee think that the combination has not been injurious to the public, and if it should become detrimental hereafter, the law can be resorted to to remedy it.

#### Worcester.

Work is now progressing on an extension from Snow Hill, Md., to Greenback on Chincoteague Bay, a distance of about 10 miles. The work is light and is being pushed forward.

#### Texas & Pacific.

The Tarrant County Construction Company, which has been formed at Fort Worth, Tex., to complete the road to that point, has secured subscriptions to the amount of \$27,000, the whole amount needed being \$60,000. Several bids for the grading have been received, and the contract will be let shortly. The contract between the construction company and the railroad company was to have been closed this week.

#### Emmitsburg Branch.

The track of this road is now all laid, and it will be formally opened Nov. 22. The new road is seven miles long, from the Western Maryland at Rocky Ridge northward to Emmitsburg. It has been built by local subscriptions and will be worked by the Western Maryland under a lease.

#### St. Louis, Lawrence & Western.

Efforts are being made to secure the extension of this road from Carbondale, Kan., to Emporia. It is said that a contract has been let for the section from Carbondale to Oage City, 26 miles. This extension would come in competition with the Atchison, Topeka & Santa Fe, which now connects the two points.

#### Walnut Valley.

Meetings are being held to advocate the construction of a narrow-gauge railroad from Emporia, Kan., through the Walnut Valley to Arkansas City.

#### Elizabeth City & Norfolk.

The former contract appears to have fallen through, for it is stated that the board of directors, at a meeting held in Elizabeth City, N. C., last week, let a provisional contract for the construction of the road to Dr. Smith, of New York. The provisional contract is to hold good for 90 days only.

#### North Shore, of Canada.

A meeting of stockholders is to be held Nov. 22, to ratify the transfer of the property to the Government in consideration of its completing the road.

#### Brantford & Norfolk.

This road is now completed and opened for travel from Tilsonburg, Ont., on the Air Line Division of the Great Western, to Springfield, about six miles.

#### Delaware Shore.

The track is now laid from the junction with the West Jersey at Woodbury, N. J., west five miles to Paulsboro, and work is progressing steadily.

#### Portland & Ogdensburg.

Work has been actively resumed on the Vermont Division, and it is expected that the contractors will soon have 400 men at work between Sheldon and Johnson. The road is all graded from Maquam Bay to Sheldon, and 4 1/2 miles of iron are down between Swanton and Highgate. The company, it is said, has been able to negotiate some of the first-mortgage bonds lately, and has kept the price up to the point fixed when they were first offered. Responsible parties in England are now investigating the merits and prospects of the enterprise with a view to taking the remainder of the issue.

#### Richmond & Danville.

The Baltimore Gazette says: "The Baltimore Steam Packet Company, owners of the Powhatan line of steamers running to Richmond, Va., have instituted suit in that city to compel the Richmond & Danville Railway Company to receive and carry through freight for that line, which was refused after the 1st of this month. Previous to that time the Steam Packet Company had been notified that such action would be taken."

"Judge Wellford, of Richmond, has, under the State law, granted a temporary injunction restraining the railway from further discrimination until a hearing is had, and citing its officers to show cause why the injunction should not be made perpetual. The origin of the difficulty, it is claimed, is rather from an old railway controversy than from any objection to the steamship line. Pending the settlement of the dispute the Powhatan line will continue to receive all the freight offered and has made arrangements to forward it with promptness to any destination by other routes than the Richmond & Danville Railway."

The controversy referred to is the attempts heretofore made by the Pennsylvania interest, which controls the Richmond & Danville and the line from Alexandria to Quantico, to secure also the control of the Richmond, Fredericksburg & Potomac road.

#### Iowa Railroad Land Company.

This company reports for October sales of 20,003.28 acres of land for \$137,575.68 and 84 town lots for \$9,057, a total of \$146,632.68, distributed among 176 purchasers. The cash collections for the month amounted to \$117,894.

#### Helena & Iron Mountain.

Col. Wm. Bailey, President of the Southwestern Construction Company, reports that this company has just closed, in New York, the purchase of 46 miles of iron and the equipment for the road; that the materials are now in hand to push through and finish the road from Helena to Forrest City, the Memphis & Little Rock junction, and that the road will be opened in a few weeks, thereby furnishing an all-through line by rail between St. Louis and Helena on the Mississippi River in Arkansas.

#### Pennsylvania Company.

The Pittsburgh Commercial says: "The Pennsylvania Company, which is not the Pennsylvania Railroad Company proper, but a separate, though auxiliary corporation, lessor of the roads belonging to the Pennsylvania Railroad system west of Pittsburgh, is putting a 6 per cent. loan upon the market for the purpose of paying off the entire floating debt, and all the equipment and construction charges for the year 1875."

#### Wheeling, Pittsburgh & Baltimore.

The Wheeling (W. Va.) Intelligencer says: "The Circuit Court, in the cases of J. N. Camden, Trustee, and J. E. Sison vs. the Wheeling, Pittsburgh & Baltimore Railroad Company, entered an order a few days ago appointing Dr. J. C. Campbell and other gentlemen as Commissioners to ascertain the damages sustained by the plaintiffs as land-owners along the line of the old Hempfield Railroad, by reason of the construction of that road. These are likely to be cases of considerable interest, as it has been so long a time since the building of that road, and we understand that there are a good many people along the line of the road whose damages have never been settled, and who have as yet not been paid for the value of the



lands taken by this company for its use as a right of way. They will at least open a wide field for litigation, and the lawyers will get plenty to do."

#### South Mountain & Boston.

The section from Augusta, N. J., to the New Jersey Midland near Deckertown, is being located and staked out by the engineers. The contractors have already begun work above Deckertown.

#### St. Joseph & Denver City.

Hassler's Reporter, of Nov. 13, says: "The sale of the Eastern Division took place on Thursday of last week, and the property covered by the mortgage was purchased on behalf of the bondholders for the sum of \$100,000."

"As about \$25,000, as near as we can estimate at present, will be needed to pay the legal expenses necessarily incurred, any one owning bonds, and who proposes not to unite in the purchase of the property, can now calculate the cash value of his bonds. The sum of \$75,000 net gives each bond of the \$1,500,000 issue a value of just 5 per cent., or \$50 for a \$1,000 bond."

"The Western Division was sold on Friday, and \$100,000 was paid for the road and the lands. There being \$5,500,000 bonds outstanding, and the expenses probably \$25,000, each \$1,000 bond, not uniting in the purchase, will receive about \$14 in cash."

#### Hartford, Mason & Clifton.

This company has just been organized to build a railroad from Hartford, Mason County, W. Va., northward along the Ohio to Mason City and Clifton, some 20 miles. The capital stock is to be \$100,000, and the office will be in Hartford.

#### West End Narrow Gauge.

The track is laid from Grand avenue in St. Louis to Normandy, eight miles, and a train has been run over the line.

#### St. Louis, Bloomfield & Louisville.

Ground was broken at Bedford, Ind., Nov. 8. The contracts are all let for the grading from that place to Bloomfield, and the work is to be done by the end of the year.

#### Gulf, Western Texas & Pacific.

The offices and machine shops are being moved from Indianola, Tex., where the buildings were recently destroyed by flood, to Cuero, the present western terminus of the road. The telegraph line is to be extended from Victoria to Cuero.

#### Panama.

At a meeting of the directors held Nov. 13, a special committee appointed to consider the question of establishing a steamship line between New York and San Francisco to be owned by this company, made its report. This report set forth that to establish a tri-monthly line ten steamers would be needed, eight to carry 300 first-class and 300 steerage passengers and 2,500 tons of freight and to cost about \$425,000 each, and two smaller vessels to cost \$200,000 each. Five of the large vessels would run between Panama and San Francisco, and three between Aspinwall and New York, while the two smaller ones would ply between Panama and the Central American ports. To pay for the vessels it is proposed to issue \$1,000,000 bonds bearing 7 per cent interest, \$400,000 to be made payable Jan. 1, 1880, and a like amount each year thereafter.

The board accepted the report and authorized the President to make contracts for the steamers, subject to the approval of the board.

The capital stock of the company is now \$7,000,000, on which 12 per cent dividends are paid; the bonded debt is \$2,794,000, and the company has to pay an annual subsidy of \$250,000 to the Government of the United States of Colombia.

#### Woodland, Clear Lake & Humboldt.

This company has abandoned its projected road, and will be discontinued and dissolved. No work has been done on the line.

#### North Pacific Coast.

Work on the extension from Tomales, Cal., northward to the Russian River will soon be suspended for the winter, to be resumed in March. In anticipation of the increase of business from the extension the company has resolved to order 6 engines, 4 passenger coaches, 80 box and 250 flat cars, all to be delivered next spring. The equipment of the road will then consist of 15 engines, 12 passenger, 100 box and 400 flat cars. The large increase of flats will be needed for the lumber trade.

#### The Contract & Finance Company.

The Sacramento (Cal.) Bee of Nov. 3 says: "In the County Court last Thursday Judge Clark granted the application of the Contract & Finance Company for permission to dissolve."

The company is the construction company which built the Central Pacific and a large part of the Southern Pacific.

#### Chicago & Michigan Lake Shore.

The general offices are to be removed from St. Joseph to Muskegon, Mich., where the General Manager already has his headquarters.

#### Chicago, Danville & Vincennes.

In Chicago, Nov. 11, the United States Circuit Court entered an order directing the Receiver to take the rental due to the Chicago & Southern Company, and instead of paying it over, apply it as follows: 1. For building a turn-table and single stall for an engine and a depot at Blue Island, not to exceed \$2,500. 2. For building a depot at Archer avenue and Forty-seventh street, Chicago, \$500. 3. For building a round-house at the crossing of the Chicago & Alton road, \$6,000. 4. For erecting telegraph poles along the line of the road, \$500. 5. The balance, if any, to be used for repairs of the road, as required. The amount due is \$9,383.33, gold.

#### Carolina Central.

A number of the employees have begun suits against the company to recover wages due them which have not been paid for three months. They are acting in concert, and it is expected that the rolling stock will be attached.

#### Oherokee.

The United States Circuit Court at Atlanta has made a decree of sale of this road and all the property. D. G. Printup, W. H. Smythe and S. F. Stephens are appointed commissioners to make the sale, of which they must give 60 days' notice by advertisement. The proceeds of the sale, after deducting the court charges and the claim of John W. Wofford for \$6,200, with interest from Jan. 1, 1872, are to be applied to satisfy the claim of Henry Clews & Co. for \$167,431.70, with interest from Oct. 5, 1870. The property covered by the decree is the road from Pryor Station, on the Selma, Rome & Dalton, east by north 45 miles, to Cartersville, on the Western & Atlantic, with all the real estate, equipment and other property. Only 23 miles of the road, from Cartersville to Rockmart, are completed.

#### Dayton & Southeastern.

Proposals will be received at the office of this company in Dayton, O., until Dec. 8, for the construction of this road, in whole or in part. Plans and specifications can be seen at the company's office after Dec. 1. The line is to run from Dayton southeastward to the coal region of Jackson County.

#### Oil Creek & Allegheny River.

In the United States Circuit Court at Pittsburgh, Nov. 10, counsel for the Pennsylvania Transportation Company, which has a claim of \$190,000 against the road, applied for an order

to show cause why the decree of foreclosure and sale should not be set aside. He charged that the company was solvent and able to pay the interest on the mortgage, and that the foreclosure was a matter of collusion and arrangement. The Court granted the order and set down the hearing for Nov. 27.

#### Kansas & Missouri Bridge.

On application of the bondholders, this bridge, which crosses the Missouri River at Leavenworth, Kan., has been put in the hands of a receiver, and Hon. H. W. Grant has been appointed to that position, with H. M. Allen, of Leavenworth, as associate.

#### Whitewater Valley.

In the suit of Sparrow and others, who are the Boston bondholders, the United States District Court, at Indianapolis, has granted an order for the appointment of a receiver, and has designated Henry Parkman for that position. This action will probably terminate the temporary lease of the road to the Indianapolis, Cincinnati & Lafayette.

#### Columbus, Chicago & Indiana Central.

The first-mortgage bondholders' committee give notice as follows: "The delay in obtaining the necessary amount of signatures to the first-mortgage bondholders' agreement of Feb. 23, 1875, has induced a considerable number of subscribers to withdraw from it and to organize under a new agreement. As there is no longer any probability of completing the original agreement, the committee hereby notify bondholders that they withdraw it, and consider their functions as a committee to have terminated."

"The bonds and assessment deposited under the agreement will be returned by the Union Trust Company, on presentation of the certificates given therefor."

#### Springfield & Northwestern.

It is said that the bondholders have made arrangements to complete the bridge over the Illinois River at Havana, which was begun by the Indianapolis, Bloomington & Western Company, and to extend the road from Havana northwest 10 miles to Lewiston, where it will connect with a branch of the Chicago, Burlington & Quincy.

#### Train Accidents in October.

Early on the morning of the 1st, on the Rensselaer & Saratoga road in Fairhaven, Vt., a freight train ran over a misplaced switch and into a pusher engine which was lying on the siding waiting for it to pass. The pusher was thrown from the track and landed bottom up at the foot of the bank, and the engine of the freight was badly damaged. The fireman of the pusher and the switchman who had neglected to close the switch were killed.

On the afternoon of the 1st, the engine of a freight train on the Flint and Pere Marquette road was thrown from the track by a misplaced switch at Flint, Mich., and badly damaged.

Late on the night of the 1st, ten cars of a freight train on the Cincinnati, Hamilton & Indianapolis road were thrown from the track near Connorsville, Ind., by a broken rail. The cars were badly broken and the track torn up for some distance.

Late on the night of the 1st, a passenger train on the Ohio & Mississippi Railway ran into the rear of a freight train near North Vernon, Ind., breaking up the caboose, throwing the passenger engine from the track and wrecking it badly.

Soon after midnight on the 2d, a Toledo, Wabash & Western freight and a Chicago & Paducah passenger train collided at the crossing of the two roads near Bement, Ill., turning both engines over and delaying trains five hours.

Early on the morning of the 3d, on the Erie Railway, near Southfield, N. Y., the second section of a freight train ran into some cars which had broken loose from the first section. The engine with the caboose and four cars were badly broken and the wreck caught fire, completely destroying three of the cars and ruining the engine.

On the evening of the 3d, the sleeping coach of an express train on the Pittsburgh Cincinnati & St. Louis road was thrown from the track near Mansfield, Pa., by the spreading of the rails.

On the night of the 3d, a train on the Vermont Central road ran into a switching engine in the St. Albans yard, breaking the tender badly.

On the night of the 3d, a passenger train on the St. Joseph branch of the St. Louis, Kansas City & Northern road ran over a cow near Swanwick, Mo., throwing the engine and three cars from the track. The engine ran into a tree and was badly damaged, injuring the engineer and fireman.

On the 4th, an east-bound train on the Central Pacific was thrown from the track near Kelton, Utah, by a broken rail, and ten cars went into the ditch and were badly broken. The road was blocked seven hours.

On the 4th, a car loaded with cotton in a train on the Seaboard & Roanoke road caught fire near Garysburg, N. C., and was entirely destroyed. The fire is believed to have caught from a spark from the engine.

On the evening of the 4th, as a stock train on the Hannibal & St. Joseph road was running out of the yard at Kansas City, Mo., it struck an engine which was standing on the Missouri River, Fort Scott & Gulf track at the crossing of the two roads, throwing it over on its side, wrecking it badly and killing the fireman.

Early on the morning of the 5th an engine and eight cars of a coal train on the Philadelphia & Reading road were thrown from the track near Limerick, Pa., by a large rock which some parties unknown had rolled upon the track.

On the 5th, as a Western Union freight train was running on the Milwaukee & St. Paul track, near Oakwood, Wis., the train broke in two, and the detached portion was run into by a following freight. The engine and 11 cars were badly broken, the engineer killed and the fireman badly hurt.

On the afternoon of the 5th a south-bound freight train on the Wilmington & Reading road was thrown from the track by a misplaced switch at Lancaster Pike, Pa. The engine and six cars left the track, breaking some of the trucks and blocking the road some hours.

On the evening of the 5th the first section of a freight train on the North Pennsylvania road was obliged to stop near York Road, Pa., owing to the breaking of the water grate. A brakeman was sent back with a signal, but he stumbled and fell, putting out his light, and before he could relight it the second section came up and ran into the rear of the first, wrecking a car and injuring the engineer somewhat.

On the night of the 5th a freight train on the New York, New Haven & Hartford road broke in two near Stamford, Conn., and the rear section a few minutes later ran into the forward one, wrecking two cars, injuring a brakeman badly and blocking the road some time.

On the morning of the 6th, as a passenger train on the Indianapolis & Vincennes road was entering Indianapolis, it ran over a misplaced switch and into a Cincinnati, Hamilton & Indianapolis engine which stood upon a siding. Both engines were damaged.

On the evening of the 6th an express train on the Chesapeake & Ohio road was thrown from the track at Marlborough, N. H., by a misplaced switch, and the engineer and fireman were somewhat hurt.

On the night of the 6th a train on the Cleveland, Columbus, Cincinnati & Indianapolis road was thrown from the track in Columbus, O., by a misplaced switch.

On the night of the 6th a freight train on the St. Louis, Kan-

sas City & Northern road was thrown from the track by defective joint at a bridge near Mexico, Mo., and ten stock were piled up together and badly wrecked, killing a number cattle and hogs.

On the morning of the 7th as an express train on the New York Division of the Pennsylvania Railroad was passing through the Jersey City yard the engine was struck by a switch engine which was coming out of a siding at a rapid rate. The passenger engine was badly damaged and one side of the switching engine was completely stripped. The fault is said to have been with the engineman of the switch engine.

On the morning of the 7th the second section of a freight train on the Vermont Central road ran into the rear of the first section at Middlesex, Vt., wrecking several cars and damaging the engine.

On the morning of the 8th, as a heavy freight train on the Chicago & Alton road was going up a grade near Alton with an engine at the rear of the train to help it up the grade, a coupling broke and the front end of the train ran ahead. The pusher kept on, however, not knowing that there was a break, and drove the rear section of the train into the forward one, wrecking five cars and throwing them over the bank.

On the morning of the 8th, as a freight train on the Chicago, Rock Island & Pacific road was near Durant, Ia., a flat car loaded with out stone broke down in the middle, the stone falling in a heap on the track. Twelve cars following were piled up on the wreck and badly broken.

On the 8th, on the transfer track in Memphis, Tenn., there was a butting collision between a Louisville & Nashville and a Memphis & Little Rock engine, by which both were slightly damaged.

Early on the morning of the 9th as a long freight train on the New York Central & Hudson River was approaching Rochester, N. Y., it broke in two, leaving all the brakemen on the rear end. The engineman called for brakes as he approached the depot, but there was no response, and he was unable to hold his train. The people at the depot tried to turn the train upon the south track to avoid a collision, seeing that it did not stop, but the switches could not all be turned in time and the train jumped the track at the last one and ran along the ties, crashing through a heavy stone pillar at the depot entrance, then ran across the platform and into the waiting room, knocking out the brick wall. There were 32 cars with the engine, and eight or ten of them were piled up upon the engine, while others were telescoped and upset outside the depot, nearly every one being wrecked. Some cars which were standing in the depot were also damaged. The engineman and fireman were caught under the engine and crushed to death. The wreck was an unusually bad one, doing an immense amount of damage.

Early on the morning of the 6th the second section of a freight train on the Grand Rapids & Indiana road ran into the rear of the first section which had stopped at Nottawa, Mich. The engine and several cars were wrecked, injuring the fireman and blocking the road several hours.

On the evening of the 9th the engine and nine cars of a freight train on the Keokuk & Des Moines road were thrown from the track near Summit, Ia., wrecking several of the cars and injuring three men. The track was blocked all night.

On the night of the 9th an excursion train on the Detroit, Lansing & Lake Michigan road ran into the rear of a repair train near Ionia, Mich., wrecking several cars and killing a brakeman.

On the evening of the 10th, as a Grand Trunk engine was backing out of the Michigan Central depot in Detroit, Mich., it ran into the rear of a Canada Southern train which was backing into the depot, damaging the sleeping coach badly.

On the evening of the 11th the tender of a train on the South Extension of the Wellington, Grey & Bruce road ran off the track near Listowell, Ont., and upset into the ditch.

Near noon on the 12th, as a coal train on the Chesapeake & Ohio Railroad, with an engine in front and a pusher in the rear, was approaching the tunnel in Richmond, Va., the first engine was thrown from the track by a misplaced switch, and before the pusher could be stopped it had piled up several cars on the first engine, wrecking it and the cars badly.

On the 12th a construction train on the New Brunswick Railway broke through a temporary bridge at West Andover, N. B., wrecking the train, killing one man and injuring five others.

On the night of the 12th a passenger car in a train on the Quincy, Alton & St. Louis road ran off the track at Fall Creek, Ill., injuring a train boy seriously and slightly bruising several passengers.

On the 13th a freight train on the Galveston, Harrisburg & San Antonio road struck a defective rail-joint on a bridge over a ravine near Harrisburg, Texas. The engine passed over, but 10 cars left the track, five of them falling into the ravine in a heap, and the bridge was broken down and almost destroyed. A brakeman was hurt and the road blocked two days.

On the afternoon of the 13th, a stock train on the Toledo, Wabash & Western road struck a misplaced rail near Hannibal, Mo., the engine and seven cars passing over the break safely, but the eight following cars left the track, went into the ditch and were badly broken, killing a number of cattle.

After dark on the evening of the 13th, at Fall Creek, Ill., on the Quincy, Alton & St. Louis road, a coach of a mixed train jumped the track at a frog and was dented, slightly injuring some passengers.

On the 14th, as a mixed train on the Atlanta & Richmond Air Line was near Spartanburg, S. C., a platform car loaded with cotton caught fire from a spark from the engine, and three cars were partly destroyed, with 102 bales of cotton.

On the afternoon of the 14th, six cars of a mixed train on the Los Angeles Division of the Southern Pacific were thrown from the track by a broken axle near Cucamongo, Cal. The cars went into the ditch and were badly broken, blocking the road several hours.

On the afternoon of the 14th seven dump cars of an ore train on the New Jersey Midland road were thrown from the track by a broken wheel at Wyckoff, N. J., and badly broken. The road was blocked for two hours.

On the afternoon of the 15th the engine of a passenger train on the Rensselaer & Saratoga road broke a parallel rod near Ballston, N. Y., shattering the cab and otherwise damaging the engine.

On the morning of the 16th a passenger train on the Pictou Branch of the Intercolonial Railway was thrown from the track near Hopewell, N. S., by the breaking of a truck wheel under the engine. The engine went down a bank 20 feet and upset, the tender passing over it, the baggage car went down the bank and the second-class car upset and rolled over on top of the engine. All the other cars left the track but remained on the road-bed. The engineman and fireman were badly bruised.

On the 16th as a special train on the New Orleans, St. Louis & Chicago road, with Vice-President West on board, was near Holly Springs, Miss., the boiler exploded, wrecking the engine and throwing pieces of the boiler and engine to a great distance. The engineman was somewhat hurt.

On the afternoon of the 16th a local passenger train on the St. Louis, Kansas City & Northern road ran into the head of a stock train near Ferguson's, Mo., wrecking both engines and several cars and injuring both enginemen and a passenger.

On the evening of the 16th the engine of a special train on the Kansas Pacific road struck a broken rail near Wyandotte, Kan., and upset into the ditch, injuring the engineman and fireman.

On the 18th two cars of a freight train on the Greenville & Columbia road were thrown from the track by a broken truck.

On the night of the 18th a train on the St. Paul & Sioux City



road ran off the track on a trestle near St. Peter, Minn., and six cars fell some 12 feet.

On the 19th there was a butting collision between a through and a local freight on the Indianapolis, Cincinnati & Lafayette road, near North Bend, O., by which both engines were wrecked and the track blocked all day.

On the afternoon of the 19th there was a butting collision between two freight trains on the Baltimore & Ohio road near Martinsburg, W. Va., by which both engines and several cars were wrecked. The wreck caught fire and five cars were destroyed.

On the evening of the 19th a train on the Kingston & Pembroke road ran off the track in Kingston, Ont.

On the morning of the 20th a wheel broke under a car of a coal train on the Boston & Albany Railroad in Boston, Mass., and 12 cars were thrown from the track and ran into some oil cars on a siding close by, breaking up several of them. Some of the coal cars were also broken and the damage was estimated at \$5,000.

On the afternoon of the 20th the engine of a construction train at work on the Chartiers Railroad near Grier, Pa., was detached and run down to the nearest tank for water. On returning the engine failed to stop in time and ran into the tank, breaking up two cars and killing the fireman who was riding on the front bumper of the engine.

On the evening of the 20th a passenger train on the Keokuk & Des Moines road ran over two steers near Monroe, Ia., throwing some of the cars from the track and blocking the road two hours.

Early on the morning of the 21st two cars of a freight train on the Erie Railway were thrown from the track at Lake View, N. J., by a broken axle, and one of them upset in such a manner that both tracks were obstructed. The road was blocked four hours.

Near midnight on the 21st, on the East Pennsylvania Branch of the Philadelphia & Reading road, a special train with a circus on board was thrown from the track by a switch that had been purposely misplaced at Mertztown, Pa. Several cars went down a bank and were wrecked.

On the morning of the 22d there was a butting collision between a freight and a passenger train on the Utica Division of the Delaware, Lackawanna & Western road, near Chenango Forks, N. Y., by which both engines were slightly damaged.

On the 22d a car loaded with cotton in a train on the Missouri, Kansas & Texas road caught fire near Deerfield, Mo., and was entirely destroyed.

On the 23d an engine on the Central Railroad of New Jersey collapsed two tubes in the boiler, when near Bergen Point, N. J., badly scalding the engineer and fireman.

On the 23d a Jeffersonville, Madison & Indianapolis train ran off the track in Louisville, Ky.

On the afternoon of the 23d, as an engine on the Port Jervis & Monticello road was running on the turn-table at Monticello, N. Y., it ran off the track, breaking the table considerably.

Near noon on the 24th, as a passenger train on the Savannah & Charleston road was near Stone Bridge, S. C., an axle broke under the engine, throwing the engine, tender and express car from the track and wrecking the car. The road was blocked six hours.

On the 24th a car of a mixed train on the Little Rock & Fort Smith road was thrown from the track by a defective joint, near Little Rock, Ark., and went into the ditch, knocking the trucks from under the baggage car which was just behind. Three men were slightly hurt.

On the afternoon of the 24th a switch engine on the Missouri Pacific road ran off the track in St. Louis and turned at right angles to the rails, obstructing the tracks for some hours.

Early on the morning of the 25th a freight train on the Baltimore & Ohio road struck a broken rail at Camden Junction, near Baltimore, and several cars were thrown from the track.

On the morning of the 25th the engine of a passenger train on the Erie Railway broke the rear driving axle in Paterson, N. J., delaying the train some time. The axle broke off close to the hub of the wheel.

On the evening of the 25th, a stock train on the Rutland Railroad broke in two near Bartonville, Vt., and as the engine was slacked up the rear part ran into the forward one throwing two of them from the track. One car went down the bank and was wrecked, killing 10 cattle.

On the evening of the 25th, the engine of a passenger train on the Carondelet Branch of the Missouri Pacific ran off the track near Carondelet, Mo., and the whole train went down a bank 20 feet, the cars upsetting and injuring a passenger.

On the evening of the 25th, four cars of a south-bound freight train on the Illinois Central road were thrown from the track at Reckton, Ill., delaying trains 10 hours.

On the evening of the 25th, an east-bound freight and a west-bound construction train came into collision near Whitfield, Ia., on the Chicago, Burlington & Quincy road, wrecking both engines and damaging 12 cars. Three laborers on the construction train were badly hurt and the road was blocked all night. The accident is said to have been caused by the failure of an operator to deliver an order.

Very early on the morning of the 26th, as a freight train on the Chicago & Pacific road was crossing the bridge over the Aux Plaines River, it struck a freight car which had been blown from a siding upon the main track by the high wind of the previous night. The engine and five cars went into the river and were wrecked, and the bridge was broken in three places. The engineer and his son, who was with him, were very badly hurt.

On the morning of the 26th there was a collision between two trains at Oakland, Pa., on the Pennsylvania Railroad, by which a passenger was killed.

On the afternoon of the 26th, on the Chicago, Burlington & Quincy road, between Tyrone and Melrose, Ia., there was a butting collision between an east-bound extra and a west-bound regular freight train, by which both engines and six box cars were wrecked, and a brakeman badly hurt. It is said that the conductor in charge of the extra got confused and did not remember where he was to meet the regular.

On the evening of the 26th the Shamokin passenger train on the Philadelphia & Reading road ran into the head of a coal train near Tuscarora, Pa. The passenger engine and several cars were badly wrecked, a passenger killed, another passenger and three of the trainmen badly hurt. The road was blocked all night.

On the morning of the 27th a freight train on the Cairo & St. Louis road ran off the track at Alto Pass, Ill., and five box cars went into the ditch, injuring a brakeman and blocking the road six hours.

On the 27th a coal train on the Albany & Susquehanna road ran off the track at Collier's, N. Y.

On the morning of the 28th, as a passenger train on the Baltimore & Potomac road was passing from the single to the double track at Lafayette, Md., the engine of a freight train coming up on the other track struck the rear car, breaking it considerably and injuring a passenger. It appears that the freight train should have stopped sooner.

On the 28th, the engine of a train on the Boston, Concord & Montreal road ran into a land-slide near Bethlehem, N. H., and was thrown from the track. The road was blocked four hours.

On the night of the 28th, as a train on the Central Railroad of Iowa was approaching Faulkner, Ia., the engine jumped the track. The rest of the train remained on the track except the rear car which also left the track and upset, falling down a bank 10 feet high. The car was badly broken and 19 of the passengers hurt. It is said that the track was in very bad condition and many of the ties rotten.

On the morning of the 29th a way train on the Washington

Branch of the Baltimore & Ohio road was thrown from the track by a misplaced switch at Beltsville, Md. The engine upset and was badly wrecked and the baggage car was a good deal broken. The fireman was caught under the engine and badly scalded.

On the 29th a train on the Ohio & Mississippi road ran off the track near Langhery Creek, Ind., and several cars went down a high bank and were wrecked, blocking the road several hours.

Very late on the night of the 29th a freight train on the Columbus, Chicago & Indiana Central road struck two stock cars which had been blown from a siding upon a bridge near Cambridge City, Ind., during a violent storm. The engine was wrecked and the two cars thrown into the creek below, breaking down a part of the bridge. The fireman was killed.

Near noon on the 30th a passenger train on the Albany & Susquehanna road was thrown from the track near Schenectady, N. Y., by the spreading of the rails, the mail, baggage, two passenger and a parlor car going down a bank 10 feet high and upsetting. The cars were much broken and two brakemen and six passengers were hurt. It appears that the track hands had been engaged in taking up the third or six-foot gauge rail and moving the standard gauge rails so as to bring them centrally on the ties, and these rails had not yet been sufficiently spiked down when the train passed.

On the evening of the 30th, a passenger train on the Morris & Essex Division of the Delaware, Lackawanna & Western road ran into a box car which had been left on a siding at East Newark, N. J., but had been blown upon the main track by a sudden gale. The car was wrecked, and the engine of the passenger train upset and was badly broken, injuring the fireman badly and the engineer slightly, and blocking the road several hours.

On the evening of the 30th, the engine of a train on the St. Paul, Stillwater & Taylor's Falls road was thrown from the track and into the ditch by a misplaced switch at Stillwater, Minn.

On the morning of the 31st the boiler of an engine on the Union Pacific exploded at Aspen, Utah, destroying the engine.

On the 31st a car of a freight train on the Connecticut Western road ran off the track near Norfolk, Conn., blocking the road three hours.

On the evening of the 31st three cars of a freight train on the Erie Railway ran off the track in Port Jervis, N. Y., delaying the train an hour.

This is a total of 88 accidents, whereby 12 persons were killed and 74 injured. Ten accidents caused death, 24 injury but not death, while 54, or 61.4 per cent. of the whole number caused no hurt serious enough to be recorded.

These accidents may be classified as to their nature and causes as follows:

COLLISIONS:	
Rear collisions.....	17
Butting collisions.....	11
Crossing collisions.....	2
Unexplained.....	1
	—31

DERAILMENTS:	
Unexplained.....	16
Misplaced switch.....	9
Broken rail.....	4
Defective rail-joint.....	3
Broken axle.....	3
Broken wheel.....	3
Spreading of rails.....	2
Castle on track.....	2
Broken bridge.....	1
Broken truck.....	1
Broken-down car.....	1
Bad track.....	1
Rail misplaced.....	1
Land-slide.....	1
Malicious obstruction.....	1
	—49

Cars burned while running.....	3
Boiler burst.....	2
Fire collapsed.....	2
Broken connecting rod.....	1
Broken axle.....	1
	—9

Total..... 88

Five collisions were caused by the breaking in two of trains, three by cars blown upon the track from sidings, two by misplaced switches, two by want of or failure to use signals, and one by a mistake in orders. One switch was purposely misplaced. Twenty-four accidents were directly caused by defects or failures in road or equipment.

The number of accidents is considerable, though smaller than in either August or September. A noticeable feature is the very large proportion of collisions and even after deducting those whose causes are directly indicated there remain enough to indicate too general carelessness in running trains and especially in signalling. Eleven accidents caused by misplaced switches are another indication of too common carelessness. The number of broken rails is unusually large for the season and, with the defective joints, perhaps indicate that economy in maintenance of way has been, in some instances unavoidably, perhaps, carried too far. One accident is directly charged to bad track, and probably many of the unexplained derailments should come under the same head. The only broken bridge recorded was a temporary structure used for purposes of construction. As compared with October, 1874, there was an increase of 7 accidents, a decrease of 4 in the number killed and an increase of 14 in the number injured.

For the year ending with October the record is as follows:

	No. of accidents.	Killed.	Injured.
November.....	82	13	69
December.....	74	12	49
January.....	131	10	96
February.....	211	11	186
March.....	122	17	73
April.....	60	9	67
May.....	54	6	43
June.....	61	35	67
July.....	73	33	50
August.....	114	27	110
September.....	116	50	182
October.....	88	12	74
Totals.....	1,186	223	1,066

The averages per day for the month were 2.84 accidents, 0.39 killed and 2.39 injured; for the year they were 3.25 accidents, 0.61 killed and 2.92 injured. Those for the month were thus below the yearly averages in each item.

#### The Best Material, Form and Proportion of Locomotive Boiler and Fireboxes.

The circular of inquiry by the Committee of the Master Mechanics' Association having this subject in charge is as follows:

The Committee appointed by the American Railway Master Mechanics' Association, at its last annual convention, on the above subject, beg leave to present for your consideration a

series of questions, and respectfully request that you will write your answers thereto in the blank space left herein, or on separate paper, as may suit your convenience. By the use of a large number of questions, your Committee have endeavored to so present them as to require, in most cases, short answers, but hope you will make them full enough to be understood; and if your experience has been such as to cover only a part of the subject, we earnestly request that you will answer such of the questions as come within your knowledge.

#### MATERIAL.

1. How many coal-burning locomotives have you on your road?
2. How many have boilers entirely of steel?
3. How many have iron boilers with iron fireboxes? How many with steel and how many with copper?
4. Do you use anthracite or bituminous coal?
5. What material for the shell of the boiler do you think best and most economical, all things considered, good iron or steel?
6. With the kind and quality of coal used on your road, what material for firebox sheets gives the best results, steel, iron, or copper?
7. If steel, is it Bessemer, open hearth, or crucible steel?
8. What is the thickness of the several sheets of the firebox that has given the best results?
9. Does the average quality of water used produce heavy scale on the heating surface?
10. What are the principal impurities in the water used, that prove most injurious?
11. Is the water obtained from rivers, creeks, wells, or surface reservoirs?
12. Have you removed fireboxes from coal-burning engines in passenger or freight service, on account of the natural deterioration of the sheets, (wearing out) and how many of each and of what material were they?
13. How many years had they been in service, and what mileage did each make?
14. What is the greatest mileage made by any of your coal-burning engines, passenger and freight respectively, with steel fireboxes that are still in good condition and free from cracks?
15. What kind of steel and whose make was used in each of the above cases?
16. What mileage may be considered a good result on your road with a coal-burning engine, passenger and freight respectively, having a steel firebox, before renewal is necessary, and what with a good quality of iron?
17. How many firebox sheets of engines on your road have cracked within the last two years, and were they steel or iron?
18. How long had such sheets been in use, and what mileage had the engine made?
19. Did the rupture take place when the boiler was warm, or when cold?
20. At the time of the rupture, had the boiler the usual supply of water in it? If not, had it been blown out while hot, and was being filled with cold water while the sheets were still warm, or was the boiler entirely empty and cooling off, or otherwise?
21. What sheets of the firebox cracked under the above circumstances?
22. Were the cracks vertical, diagonal or horizontal, and about what length; and were they near the vertical center line of firebox?
23. Did the cracks follow the line of staybolt holes a part, or all of the distance?
24. How far above the grates was the point of beginning, or the point where the two parts of the sheet were farthest apart, after the crack occurred?
25. What was the thickness of the sheets that cracked in each case?
26. What water space did the boiler have around the firebox, front, back and sides, from grate to crown sheet?
27. Was there any scale on the water side of the cracked sheets, and how thick was it?
28. If the ruptured sheets were of steel, was it Bessemer, open hearth, or crucible, and of whose manufacture?
29. Were any tests made of parts of the sheets next to the crack, to ascertain the strength and ductility of the metal in the condition it was at the time of the rupture, and what were the results?
30. About what were the dimensions of each sheet that cracked, and the distance from grate bars to crown sheet?

#### FORM AND PROPORTION.

31. In your opinion, what changes should be made in the form of the firebox in common use, to increase the evaporation of water to a given weight of coal consumed?
32. In your experience, has a long and comparatively shallow firebox proved more economical in fuel than the same area of heating surface in a shorter and deeper one?
33. Has the increased surface and area of firebox obtained by lengthening the box and shortening the tubes resulted in economy of fuel?
34. Have you had any experience in the use of inclined grates, and how do they compare with horizontal grates in economy of fuel, with the same area of heating surface above the grate in both cases?
35. Have water-tables or similar appliances placed within the firebox proved more economical than the same area of heating surface in a plain firebox, as regards the consumption of fuel?
36. Have you had any experience with the "Weston boiler"? If so, to what extent is it more economical in the consumption of fuel than the ordinary pattern of boiler having the same area of firebox and tube-heating surface?
37. In your opinion, would a decrease of 25 per cent. in the usual water spaces around the firebox, and an increase in same proportion of the heating surface, so as to require a less evaporation per foot of surface, result in economy of fuel? If so, why?
38. Have you found it beneficial to admit air to the firebox through tubes or hollow stays above the grate? If so, at what height above?
39. What is the total area of such tubes or hollow stays, compared with the area of the smoke stack?
40. Have you used the steam jet for introducing air into the firebox above the grate to assist in a better combustion of the gases? If so, with what results?
41. Have you made any experiments in enlarging the smoke box, raising the exhaust nozzles, or substituting the plain open stack for the usual diamond stack? If so, with what result?
42. Can you suggest any change in the proportions of tube surface to that of firebox, or quantity of water contained in the boiler, from that in common practice, that would result in economy of fuel? If so, what are they?
43. If you have used corrugated sheets of iron or steel for fireboxes, state how long they last, and how they compare with plain sheets as regards durability, and whether any have cracked without apparent cause?
44. Is the same surface area of a corrugated sheet of equal value as heating surface as that of a plain sheet?

Please give the Committee any facts in your possession bearing upon the above subjects that may not be called out by the foregoing questions.

R. WELLS, J., M. & I. R. R.  
C. R. PEDDLE, T. H. & I. R. R.  
S. J. HAYES, I. C. R. R.  
S. M. CUMMINGS, P., Ft. W. & C. R. R.  
L. S. YOUNG, C., C. & I. R. R.  
Committee.

Please address replies, not later than March 15, 1876, to R. WELLS, Master Mechanic, Jeffersonville, Ind.